Krishnan
09/855329


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FILE 'REGISTRY' ENTERED AT 14:23:21 ON 05 AUG 2002
                E CYCLODEXTRIN/CN
L1            1 S E3
                E ".ALPHA.-CYCLODEXTRIN"/CN
L2            1 S E3
                E ".BETA.-CYCLODEXTRIN"/CN
L3            1 S E3
                E ".GAMMA.-CYCLODEXTRIN"/CN
L4            1 S E3
                E HYDROXYMETHYL CYCLODEXTRIN/CN 5
                E "CYCLODEXTRIN, HYDROXYMETHYL"/CN 5
                E METHYL CYCLODEXTRIN/CN 5
                E "CYCLODEXTRIN, METHYL"/CN 5
L5            4 S L1 OR L2 OR L3 OR L4

FILE 'HCAPLUS' ENTERED AT 14:25:25 ON 05 AUG 2002
L1            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  CYCLODEXTRIN/CN
L2            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  .ALPHA.-CYCLODEXTRIN/CN

L3            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  .BETA.-CYCLODEXTRIN/CN

L4            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  .GAMMA.-CYCLODEXTRIN/CN

L5            4 SEA FILE=REGISTRY ABB=ON  PLU=ON  L1 OR L2 OR L3 OR L4
L6        22326 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L5 OR CYCLODEXTRIN OR
                CYCLO DEXTRIN
L7          998 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 AND (SURFACTANT OR
                SURFAC?(1A)ACTIVE)
L8          224 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 AND (MOL OR MOLECULE)

L9           17 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 AND (CAPTUR? OR
                RETRIEV? OR ISOL? OR REMOV?)

L9   ANSWER 1 OF 17  HCAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:        2002:144710  HCAPLUS
DOCUMENT NUMBER:         136:196321
TITLE:                   Activation of denatured proteins by artificial
                         chaperones. Development of protein refolding
                         method
AUTHOR(S):               Machida, Sachiko; Hayashi, Kiyoshi
CORPORATE SOURCE:        Food Res. Inst., Independent Adm. Inst.,
                         Tsukuba, 305-8642, Japan
SOURCE:                  BRAIN Techno News (2002), 89, 21-24
                         CODEN: BTEEEC; ISSN: 1345-5958
PUBLISHER:               Seibutsukei Tokutei Sangyo Gijutsu Kenkyu
                         Suishin Kiko
DOCUMENT TYPE:           Journal; General Review
LANGUAGE:                Japanese
AB   A review. Activation of recombinant proteins accumulated as
     inactive inclusion bodies in Escherichia coli is performed by
     unfolding the incorrect conformation of the proteins with guanidine
     hydrochloride, removing the denaturant by addn. of a large
     excess of surfactants such as Tween 40, Tween 60, CTAB, SB
     3-14, etc., and refolding the denatured proteins using high-
     mol-wt. cycloamylose (d.p. 17 to several hundreds).
     Usefulness of this artificial chaperone system is tested for
     refolding of citrate synthase, carbonic anhydrase B, and lysozyme.
IT   12619-70-4, Cycloamylose
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RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(activation (refolding) of denatured proteins by artificial chaperone system using **surfactants** and cycloamylose)

L9 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:118712 HCAPLUS
TITLE: The estimation of PAH bioavailability in contaminated sediments using hydroxypropyl-.beta.-**cyclodextrin** and Triton X-100 extraction techniques
AUTHOR(S): Cuypers, Chiel; Pancras, Tessa; Grotenhuis, Tim; Rulkens, Wim
CORPORATE SOURCE: Department of Environmental Technology, Wageningen University, Wageningen, 6700 EV, Neth.
SOURCE: Chemosphere (2002), 46(8), 1235-1245
CODEN: CMSHAF; ISSN: 0045-6535
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A study was conducted to det. whether **cyclodextrins** and **surfactants** can be used to predict polycyclic arom. hydrocarbon (PAH) bioavailability in polluted sediment. Two sediment samples were extd. with aq. solns. of hydroxypropyl-.beta.-**cyclodextrin** (HPCD) and Triton X-100, resp. PAH **removal** during extn. was compared with PAH **removal** during biodegrdn. and solid-phase extn. The latter 2 methods were used as ref. methods to establish which part of the PAH could be biodegraded and to what extent biodegrdn. was governed by bioavailability limitations. It was demonstrated that HPCD extn. followed solid-phase extn. **removed** primarily readily bioavailable PAH, while Triton X-100 extd. readily and poorly bioavailable PAH. HPCD did not affect PAH degrdn. in biodegrdn. expts., while Triton X-100 enhanced degrdn. of low **mol.** wt. PAH. It was concluded that HPCD extn. may provide a good method to predict PAH bioavailability and that Triton X-100 extn. is unfit to predict PAH bioavailability.
IT INDEXING IN PROGRESS
REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:35502 HCAPLUS
DOCUMENT NUMBER: 136:75128
TITLE: Synthesis of mesoporous titanium dioxide materials by using a mixture of organic compounds as a non-**surfactant** template
AUTHOR(S): Zheng, Jin-Yu; Pang, Jie-Bin; Qiu, Kun-Yuan; Wei, Yen
CORPORATE SOURCE: Department of Polymer Science and Engineering, College of Chemistry & Molecular Engineering, Peking University, Beijing, 100871, Peop. Rep. China
SOURCE: Journal of Materials Chemistry (2001), 11(12), 3367-3372
CODEN: JMACEP; ISSN: 0959-9428

PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Mesoporous TiO2 materials were successfully prepd. at ambient temp. via HCl-catalyzed hydrolysis and polycondensation reactions of titanium(IV) n-butoxide by employing a mixt. of .beta.-**cyclodextrin** (CD) and urea (U) as a non-**surfactant** template, followed by **removal** of the mixt. with water extn. FTIR anal. demonstrates the complete **removal** of the template **mols**. after extn. with water. The characterization results of nitrogen adsorption-desorption measurements show that the obtained materials have type IV isotherms with H2 hysteresis loops. The BJH pore size distribution plots indicate that the pore sizes show no obvious changes with the decrease in wt. ratio of CD/U (3.7-4.1 nm) or increase in template content (3.9-3.6 nm). The interactions induced by hydrogen bonding between these 2 **mols**. and inorg. species play important roles in the above results. Small- and large-angle powder x-ray diffraction patterns and TEM reveal that the afforded TiO2 materials have anatase structures as well as disordered pore structures.
IT **7585-39-9**, .beta.-**Cyclodextrin**
RL: MOA (Modifier or additive use); USES (Uses)
(prepn. of mesoporous titania using **cyclodextrin**/urea template)
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:851328 HCAPLUS
DOCUMENT NUMBER: 135:359460
TITLE: Compositions comprising **cyclodextrin**
INVENTOR(S): Uchiyama, Hirotaka; Woo, Ricky Ah-Man; Duval, Dean Larry; Reece, Steven; Stickney, Janese Christine O'Brien; Cobb, Daniel Scott
PATENT ASSIGNEE(S): Procter + Gamble Company, USA
SOURCE: PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001088076	A1	20011122	WO 2001-US15164	20010510
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002007055	A1	20020117	US 2001-855440	20010515

US 2002010154	A1	20020124	US 2001-855337	20010515
US 2002010106	A1	20020124	US 2001-855816	20010515

PRIORITY APPLN. INFO.:
US 2000-204161P P 20000515
US 2000-204162P P 20000515
US 2000-204163P P 20000515
US 2000-257848P P 20001221

AB A stable compn. for **removing** unwanted **mols**. from a surface comprises functionally-available **cyclodextrin** and **cyclodextrin**-incompatible material. The compns. are suitable for **capturing** unwanted **mols**. from inanimate surfaces, including fabrics, including carpets, and household surfaces such as countertops, dishes, floors, garbage cans, ceilings, walls, carpet padding, air filters, and the like, and from animate surfaces, including skin, hair, and the like. The compns. can further comprise **cyclodextrin**-compatible materials and other optional ingredients.

IT **12619-70-4, Cyclodextrin**
RL: TEM (Technical or engineered material use); USES (Uses)
(compns. comprising **cyclodextrin**)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:704745 HCAPLUS
DOCUMENT NUMBER: 135:253494
TITLE: Kit for artificial chaperon
INVENTOR(S): Machida, Sachiko; Hayashi, Kiyoshi
PATENT ASSIGNEE(S): Ministry of Agriculture, Forestry and Fisheries of Japan, National Food Research Institute, Japan; Seibutsu Kei Tokutei Sangyo Gijutsu Kenkyu Suishin Kiko
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001261697	A2	20010926	JP 2000-71533	20000315

AB A kit for artificial chaperon is provided, which is capable of rewinding a protein for which it is difficult or impossible to take a proper conformation without a help by a **mol**. chaperon due to its low spontaneous folding ability into a proper conformation within a short time, and furthermore, making it fold as an active form. The kit contains a cyclic carbohydrate, cycloamylose, and a polyoxyethylene-type **surfactant** or an ionic **surfactant**. In this method of rewinding a protein into a proper conformation and making it fold as an active form, a substance causing a denatured state to the protein is dild. by adding a specific **surfactant** to the denatured protein, and the protein is prevented from the aggregation due to self-assocn. Then, cycloamylose is added to **remove** the **surfactant** using its inclusion ability.

IT **12619-70-4**, Cycloamylose
RL: NUU (Other use, unclassified); USES (Uses)

(kit for artificial chaperon)

L9 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:835052 HCAPLUS
DOCUMENT NUMBER: 134:46295
TITLE: Hydrocarbon degradation by a soil microbial population with .beta.-**cyclodextrin** as **surfactant** to enhance bioavailability
AUTHOR(S): Bardi, L.; Mattei, A.; Steffan, S.; Marzona, M.
CORPORATE SOURCE: Dipartimento di Chimica Generale ed Organica Applicata-Corso Massimo D'Azeglio, Turin, 48-10125, Italy
SOURCE: Enzyme and Microbial Technology (2000), 27(9), 709-713
CODEN: EMTED2; ISSN: 0141-0229
PUBLISHER: Elsevier Science Ireland Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Generally, the biodegrdn. of non-chlorinated aliph. and arom. hydrocarbons is affected by their bioavailability. Hydrocarbons are very poorly sol. in water. They are easily adsorbed to clay or humus fractions in the soil, and pass very slowly to the aq. phase, where they are metabolized by microorganisms. **Surfactants** that increase their soly. and improve their bioavailability can accelerate degrdn. **Cyclodextrins** are natural compds. that form sol. complexes with hydrophobic **mols**. They are widely used in medicine and harmless to microorganisms and enzymes. Their in-vitro effect on the biodegradative activity of a microbial population **isolated** from a petroleum-polluted soil, as shown by the decrease of dodecane (C12), tetracosane (C24), anthracene, and naphthalene added individually as the sole C source to mineral medium liq. cultures is described. .beta.-**Cyclodextrin** accelerated degrdn. of all 4 hydrocarbons, particularly naphthalene, and affected growth kinetics as shown by a higher biomass yield and better utilization of hydrocarbon as a C and energy source. Its low cost, bio-compatibility, and effective acceleration of degrdn. make .beta.-**cyclodextrin** an attractive option for bioremediation.
IT **7585-39-9**, .beta.-**Cyclodextrin**
RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)
(.beta.-**cyclodextrin** addn. effect on enhanced bioavailability of hydrocarbon for subsequent degrdn. by bacteria **isolated** from petroleum-polluted soil)
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:40800 HCAPLUS
DOCUMENT NUMBER: 130:172553
TITLE: **Cyclodextrin**-Enhanced Solubilization and **Removal** of Residual-Phase Chlorinated Solvents from Porous Media
AUTHOR(S): Boving, Thomas B.; Wang, Xiaojiang; Brusseau, Mark L.
CORPORATE SOURCE: Hydrology and Water Resources Department, University of Arizona, Tucson, AZ, 85711, USA

TD180.E5

SOURCE: Environmental Science and Technology (1999), 33(5), 764-770
CODEN: ESTHAG; ISSN: 0013-936X
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The development of improved methods for remediation of contaminated aquifers has emerged as a significant environmental priority. One technol. that appears to have considerable promise involves the use of solubilization agents such as **surfactants** and cosolvents for enhancing the **removal** of residual phase immiscible liqs. We examd. herein the use of **cyclodextrin**, a glucose-based **mol.**, for solubilizing and **removing** residual-phase immiscible liq. from porous media. Batch expts. were conducted to measure the degree of trichloroethene (TCE) and tetrachloroethene (PCE) solubilization induced by hydroxypropyl-.beta.-**cyclodextrin** (HPCD) and methyl-.beta.-**cyclodextrin** (MCD). These studies revealed that the solubilities of TCE and PCE were enhanced by up to 9.5 and 36.0 times, resp. Column expts. were conducted to compare water and **cyclodextrin**-enhanced flushing of Borden sand contg. residual saturations of TCE and PCE. The results indicate that solubilization and mass **removal** were enhanced substantially with the use of **cyclodextrins**. The effluent concns. during the steady-state phase of the HPCD (5% and 10%) and MCD (5%) flushing expts. were close to the apparent solubilities measured with the batch expts., indicating equil. concns. were maintained during the initial phase of **cyclodextrin** flushing. Mobilization was obsd. for only the TCE-MCD (5% and 10%) and PCE-5%MCD expts.

IT **7585-39-9D**, .beta.-**Cyclodextrin**, methyl ethers
12619-70-4, **Cyclodextrin**
RL: NUU (Other use, unclassified); USES (Uses)
(**cyclodextrin** enhanced solubilization and **removal** of residual phase chlorinated solvents from porous media)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:719811 HCAPLUS
DOCUMENT NUMBER: 129:318091
TITLE: Control fouling and cleaning procedures of UF membranes by a streaming potential method
AUTHOR(S): Pontie, M.; Durand-Bourlier, L.; Lemordant, D.; Laine, J. M.
CORPORATE SOURCE: Laboratoire d'Electrochimie et de Chimie Analytique, Ecole Nationale Superieure de Chimie de Paris, Paris, F-75231, Fr.
SOURCE: Separation and Purification Technology (1998), 14(1-3), 1-11
CODEN: SPUTFP; ISSN: 1383-5866
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The impact of cleaning procedures on org. ultrafiltration (UF) membranes was studied in terms of permeability, streaming potential

(SP) and wettability. SP measurements of UF membranes are realized using a new design. This new design is more convenient to det. the SP for all kinds of modules (planar, hollow fiber, etc.). We used this design to control the efficiency of cleaning procedures. Furthermore, SP is used to det. the isoelec. points (IEPs) of two materials [polyethersulfone (PES) and cellulose triacetate (CTA)]. The IEPs were exptl. detd. from SP variations with pH at a given ionic strength (0.001 **mol** 1-1). The IEPs of both membranes studied are resp. 3.1 and 3.4. The study of the charge origin on the org. membranes showed that the adsorbing ions are those of water itself. In order to model the fouling with natural org. matter and to study the impact of cleaning procedures, the PES membrane was first modified by the surface adsorption of **surface active** agents (SAAs). For this purpose, a neutral (Triton X100, TX100) and a cationic [dodecyltrimethylammonium (DTAB)] SAA were studied. SAAs were used at a concn. in soln. near that of CMC. The wettability of the fouled and virgin membranes was evaluated by contact angle measurements. An increase in the contact angle of a droplet deposited on the fouled membrane was correlated to a decrease in its permeability. Furthermore, the contact angle measurements show the acidic characteristic of the PES material at low pH. The use of .beta.-**cyclodextrin**, a well-known host complexing agent for SAAs, was found to present a better efficiency to **remove** neutral SAAs than cationic SAAs, which are strongly bonded to the neg. charged PES membrane. The impact of cleaning procedures on CTA membranes fouled with Seine River water was evaluated in the light of these SP measurements. It appeared clearly that the streaming potential is a useful tool for the control of the membrane surface charge after cleaning procedures.

IT **7585-39-9**, .beta.-**Cyclodextrin**
RL: NUU (Other use, unclassified); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(control fouling and cleaning procedures of ultrafiltration membranes by a streaming potential method)

L9 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:206053 HCAPLUS
DOCUMENT NUMBER: 128:299444
TITLE: Amphiphilic **cyclodextrin** nanospheres: particle solubilization and reconstitution by the action of a nonionic detergent
AUTHOR(S): Lemos-Senna, Elenara; Wouessidjewe, Denis; Duchene, Dominique
CORPORATE SOURCE: Faculte de Pharmacie, URA 1218, Biopharmacie, Pharmacotechnie, Laboratoire de Physico-Chimie, Universite Paris-Sud, Chatenay Malabry, 92296, Fr.
SOURCE: Colloids and Surfaces, B: Biointerfaces (1998), 10(5), 291-301
CODEN: CSBBEQ; ISSN: 0927-7765
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Cyclodextrin** nanospheres are a new type of colloidal carrier system that has been intensively studied in the area of pharmaco-tech. aspects of drug assocn. However, the phys. stability of this carrier has rarely been investigated, mainly towards the

presence of another amphiphilic **mol**. in its environment. In this work, the first results relating to the action of solubilizing **surfactants** on nanospheres prepd. from the amphiphilic 2,3-di-O-hexanoyl cyclomaltooctaose [.gamma.CDC6, av. molar degree of substitution (MDS)=6.25] are described using n-octyl-.beta.-D-glucopyranoside (OG) as the model. Solubilization expts. were performed by continuous addn. of OG into nanosphere suspensions and it was demonstrated that, at a given crit. ratio, this nonionic detergent disrupts the spherical structure of the initial particles. The evidence of the .gamma.CDC6-OG mixed micelle formation was provided by changes in the turbidity of suspensions with OG addn. and by TEM micrographs. Reconstitution of the particles was performed by two detergent **removal** procedures: water diln. of micellar solns. and detergent dialysis. In both cases, the formation of new aggregates was demonstrated by changes in the turbidity of the initial mixed micelles. TEM micrographs revealed reconstituted nanoparticles. The QELS size and shape of the particles was dependent on the rate of detergent **removal**, but not on the initial .gamma.CDC6 and OG concns.: fast OG elimination led to the most regular spherical shapes. Finally, the entrapment upon detergent **removal** of the hydrophobic drug progesterone previously dissolved in the mixed micelles was investigated. In conclusion, all the results demonstrated that detergents can interact with nanospheres in a reversible process. These results will be very useful in stability studies, and also in the pharmaco-tech. development of nanospheres constituted by amphiphilic **cyclodextrins**.

L9 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:170387 HCAPLUS
DOCUMENT NUMBER: 128:280548
TITLE: Homogeneous assay for measuring low-density lipoprotein cholesterol in serum with triblock copolymer and .alpha.-**cyclodextrin** sulfate
AUTHOR(S): Sugiuchi, Hiroyuki; Irie, Tetsumi; Uji, Yoshinori; Ueno, Tomohiro; Chaen, Toshiko; Uekama, Kaneto; Okabe, Hiroaki
CORPORATE SOURCE: Department of Central Laboratory, Kumamoto University Hospital, Kumamoto, 860, Japan
SOURCE: Clinical Chemistry (Washington, D. C.) (1998), 44(3), 522-531
CODEN: CLCHAU; ISSN: 0009-9147
PUBLISHER: American Association for Clinical Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We have developed a fully automated method for measuring LDL-cholesterol (LDL-C) in human serum without the need for prior sepn., using a nonionic **surfactant**, polyoxyethylene-polyoxypropylene block copolyether (POE-POP), and a sodium salt of sulfated cyclic maltohexose, .alpha.-**cyclodextrin** sulfate. Of the **surfactants** tested, POE-POP with a higher **mol**. mass of the POP block and a greater hydrophobicity reduced the reactivity of cholesterol in lipoprotein fractions; the reactivity in descending order was LDL .mchgt. VLDL > chylomicron .apprxeq. HDL. Gel filtration chromatog. studies revealed that POE-POP **removed** lipids selectively from the LDL fraction and allowed them to participate in the cholesterol

esterase-cholesterol oxidase coupling reaction system. By contrast, .alpha.-**cyclodextrin** sulfate reduced the reactivity of cholesterol, esp. in chylomicrons and VLDL. A combination of POE-POP with .alpha.-**cyclodextrin** sulfate provided the required selectivity for the detn. of LDL-C in serum in the presence of magnesium ions and a small amt. of dextran sulfate without pptg. lipoprotein aggregates. There was a good correlation between the results of LDL-C assayed by the proposed method and the beta-quantification ref. method involving 161 sera with triglyceride concns. ranging from 0.3 to 22.6 mmol/L.

L9 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:499123 HCAPLUS
DOCUMENT NUMBER: 127:195473
TITLE: Gas bubble suspensions and their application as an ultrasound contrast medium
INVENTOR(S): Bergmann, Martina; Heldmann, Dieter; Weitschies, Werner
PATENT ASSIGNEE(S): Schering A.-G., Germany; Bergmann, Martina; Heldmann, Dieter; Weitschies, Werner
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9726016	A2	19970724	WO 1997-EP208	19970116
WO 9726016	A3	19971023		
W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19602930	A1	19970724	DE 1996-19602930	19960118
CA 2243174	AA	19970724	CA 1997-2243174	19970116
AU 9715925	A1	19970811	AU 1997-15925	19970116
EP 874644	A2	19981104	EP 1997-902178	19970116
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000504317	T2	20000411	JP 1997-525697	19970116
ZA 9700414	A	19970717	ZA 1997-414	19970117
NO 9803332	A	19980717	NO 1998-3332	19980717

PRIORITY APPLN. INFO.: DE 1996-19602930 A 19960118
WO 1997-EP208 W 19970116

AB A compn. for generating stable gas bubble suspensions for application as an ultrasound contrast medium comprises a solid, porous, water-sol. matrix contg. a low-**mol**.-wt. lattice-forming substance, a **surfactant**, and a gas, the gas being occluded in the pores of the matrix. The porous matrix is prepd. by freeze-drying an aq. soln. of the lattice-forming substance contg. bubble-stabilizing **surfactants**, and the pores are subsequently filled with the gas. The matrix generates a reproducible no. of stable bubbles of reproducible size which produce high contrast intensity and long-lasting contrast. The

matrix is produced without use of org. solvents, and is rapidly excreted through the kidneys. Suitable lattice-forming substances include amino acids, sugars, and low-**mol**.-wt. radiog. and NMR contrast agents. Thus, 20 g dextran (**mol**. wt. .apprx.1200) and 0.2 g Zonyl FSO-100 (**surfactant**; **mol**. wt. .apprx.725) were dissolved in 80 g H2O, and the soln. was divided into 5-g aliquots and freeze-dried; the p;porous matrix was subjected to gas exchange with decafluorobutane. Resuspension of the matrix in 10 mL H2O generated 12.3 .times. 109 bubbles of size 0.56-7.46 .mu.m.

IT **7585-39-9**, .beta.-**Cyclodextrin** **7585-39-9D**, .beta.-**Cyclodextrin**, 2-hydroxypropyl ether
10016-20-3, .alpha.-**Cyclodextrin**
17465-86-0, .gamma.-**Cyclodextrin**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gas bubble suspensions and their application as ultrasound contrast medium)

L9 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:687276 HCAPLUS
DOCUMENT NUMBER: 125:321567
TITLE: Artificial Chaperone-Assisted Refolding of Denatured-Reduced Lysozyme: Modulation of the Competition between Renaturation and Aggregation
AUTHOR(S): Rozema, David; Gellman, Samuel H.
CORPORATE SOURCE: Department of Chemistry, University of Wisconsin, Madison, WI, 53706, USA
SOURCE: Biochemistry (1996), 35(49), 15760-15771
CODEN: BICHAW; ISSN: 0006-2960
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Conditions that promote renaturation of an unfolded protein also promote protein aggregation, in many cases, because these competing intramol. and intermol. processes are driven by similar networks of noncovalent interactions. The GroEL/GroES system and related biol. chaperones facilitate the renaturation of substrate proteins by minimizing the aggregation pathway. We have devised a two-step method in which small **mols**., artificial chaperones, facilitate protein refolding from a chem. denatured state. In the first step, the protein is **captured** by a detergent as guanidinium chloride is dild. to a non-denaturing concn.; formation of a protein-detergent complex prevents both protein aggregation and proper refolding. In the second step, a **cyclodextrin** strips detergent from the protein, allowing the protein to refold. Here we describe the first application of this method to a protein that must form disulfides in the native state. Lysozyme (hen egg white) can be refolded from the Gdm-denatured, DTT-reduced state in good yields at final protein concns. as high as 1 mg/mL with the artificial chaperone method. Several mechanistic aspects of artificial chaperone-assisted refolding are probed, and a detailed mechanism for the kinetically controlled stripping step is proposed.

IT **7585-39-9D**, .beta.-**Cyclodextrin**, Me derivs.
10016-20-3, .alpha.-**Cyclodextrin**
RL: NUU (Other use, unclassified); USES (Uses)
(modulation of the competition between renaturation and aggregation in artificial chaperone-assisted refolding of

denatured-reduced lysozyme)

L9 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:653271 HCAPLUS
DOCUMENT NUMBER: 125:303850
TITLE: Laundry article for preventing dye carry-over and indicator therefor
INVENTOR(S): Johnson, Kaj A.; Van Buskirk, Gregory; Gillette, Samuel M.
PATENT ASSIGNEE(S): Clorox Company, USA; Precision Fabrics Group, Inc.
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9626831	A1	19960906	WO 1996-US2531	19960222
W: CA, JP, MX				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2209173	AA	19960906	CA 1996-2209173	19960222
EP 812261	A1	19971217	EP 1996-907115	19960222
R: DE, ES, FR, GB, IT				
JP 11501368	T2	19990202	JP 1996-526355	19960222

PRIORITY APPLN. INFO.: US 1995-396853 19950301
WO 1996-US2531 19960222

AB A system for **removing** extraneous, random free-flowing dyes from laundry washing applications comprises a laundry article that can freely circulate among items being laundered. The laundry article comprises a dye absorber and a dye transfer inhibitor which are introduced into a wash liquor via a support matrix. The dye absorber maintains a relational assocn. with the support matrix in the wash liquor, whereas the dye transfer inhibitor is delivered up from the support matrix to the wash liquor and may be evenly distributed through the wash liquor. The laundry article provides a method for preventing the redeposition of extraneous dyes onto other wash items, while simultaneously providing an indicator system for the manifestation of such scavenging process. A typical laundry article was manufd. by dipping a fabric composed of 54% wood pulp and 46% polyester fibers in a mixt. contg. Reten 203 (low-to-medium **mol.** wt., high-charge d. cationic resin) 100, Polycup 1884 (water-sol. epichlorohydrin-polyamide) 50, and water 250 g, passing the impregnated fabric through 2 nip rollers, and cured 60 s at 300.degree.F.

IT **12619-70-4, Cyclodextrin**
RL: TEM (Technical or engineered material use); USES (Uses)
(dye-transfer inhibitors; impregnated fabrics contg. dye absorber and dye transfer inhibitor for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

L9 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:644503 HCAPLUS
DOCUMENT NUMBER: 121:244503
TITLE: New pseudostationary phases for electrokinetic

chromatography: a high-molecular **surfactant** and proteins
AUTHOR(S): Terabe, Shigeru; Ozaki, Hiroto; Tanaka, Yoshihide
CORPORATE SOURCE: Fac. Sci., Himeji Inst. Technol., Kamigori, 678-12, Japan
SOURCE: J. Chin. Chem. Soc. (Taipei) (1994), 41(3), 251-7
CODEN: JCCTAC; ISSN: 0009-4536
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To extend the applicability of electrokinetic chromatog. (EKC), 2 new types of pseudostationary phases were introduced. A high-**mol. surfactant**, Bu acrylate/butyl methacrylate/methacrylic acid copolymer (BBMA) is employed as a micelle-forming **surfactant** for micellar electrokinetic chromatog. (MEKC). The crit. micelle concn. of BBMA is essentially zero, which means the micellar concn. is const. irresp. of temp. and buffer. Some characteristic features of BBMA as the pseudostationary phase for MEKC are studied in comparison with conventional ionic **surfactants**. Ovomucoid and avidin, which are proteins **isolated** from egg white, are useful chiral selectors in affinity EKC. A few examples of the sepn. of enantiomers with these proteins are shown.
IT **7585-39-9**, .beta.-**Cyclodextrin**
RL: ANST (Analytical study)
(in micellar electrokinetic chromatog.)

L9 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:532438 HCAPLUS
DOCUMENT NUMBER: 121:132438
TITLE: **Cyclodextrin**/cholesterol complexation and technology for **removing** cholesterol from eggs and dairy products
AUTHOR(S): Sidhu, G. S.; Oakenfull, D. G.
CORPORATE SOURCE: Food Res. Lab., CSIRO Div. Food Process., North Ryde, 2113, Australia
SOURCE: Minutes Int. Symp. Cyclodextrins, 6th (1992), 314-23. Editor(s): Hedges, Allan R. Ed. Sante: Paris, Fr.
CODEN: 60BCAL
DOCUMENT TYPE: Conference; General Review
LANGUAGE: English
AB A review and discussion with 28 refs. .beta.-**Cyclodextrin** forms a strong inclusion complex with cholesterol. Eggs and milk are excellent food but are rich in cholesterol and their nutritional value would be enhanced if this cholesterol were **removed**. Phys., these foods take the form of oil-in-water emulsions in which the cholesterol, being slightly **surface-active**, is concd. at the oil-water interface. The cholesterol **mols**. are therefore accessible to .beta.-**cyclodextrin** in the aq. phase. In the cold, the .beta.-**cyclodextrin**-cholesterol complex is insol. and can be sepd. from the food product by centrifugation. This simple process is the basis of a very efficient technol. for extg. cholesterol from egg and dairy products - the SIDOAK Process.
IT **7585-39-9**, .beta.-**Cyclodextrin**
RL: BIOL (Biological study)

(cholesterol complexation with, in SIDOAK Process for extg. cholesterol from eggs and dairy products)

L9 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:147914 HCAPLUS
DOCUMENT NUMBER: 118:147914
TITLE: Synthesis and properties of cyclo-.alpha.-1,4-manno-2,3-epoxides
AUTHOR(S): Coleman, Anthony W.; Zhang, Ping; Ling, Chang Chun; Mahuteau, Jacqueline; Parrot-Lopez, Helene; Miocque, Marcel
CORPORATE SOURCE: Cent. Pharm., Univ. Paris-Sud, Fr.
SOURCE: Supramol. Chem. (1992), 1(1), 11-14
CODEN: SCHEER; ISSN: 1061-0278
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Treatment of per-2-O-tosyl-**cyclodextrins** I (n = 6,7,8) with K2CO3 allows the synthesis of cyclomannoepoxides II in high yields (>90%). The glucopyranose structure of II, is assigned from the 1H coupling pattern (J1,2 = 0 Hz, J2,3 = 3.5 Hz, J3,4 = 0 Hz), as a half chair conformation. II (n = 7) shows **surfactant** properties in water. Full anal. of the NMR spectra of II has been carried out. The inclusion and hydrolytic properties of II differ from those of the parent **cyclodextrins** as a result of a lack of secondary hydroxyl groups capable of forming hydrogen-bonded dimers.

L9 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:121903 HCAPLUS
DOCUMENT NUMBER: 110:121903
TITLE: The sequestering of **surfactants** from insoluble monolayers by .alpha.-, .beta.- and .gamma.-**cyclodextrins**
AUTHOR(S): Asgharian, B.; Cadenhead, D. A.; Goddard, E. D.
CORPORATE SOURCE: Dep. Chem., State Univ. New York, Buffalo, NY, 14214, USA
SOURCE: Colloids Surf. (1988), 34(2), 143-9
CODEN: COSUD3; ISSN: 0166-6622
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A study of the sequestering of insol. **surfactants** by .alpha.-, .beta.-, and .gamma.-**cyclodextrins** from monomol. films at the air/water interface is reported. Sequestering of single-chain **surfactants** by .alpha.- and .beta.-**cyclodextrins** takes place at a rate consistent with the direct **removal** of the **surfactant mol.** from the air/water interface and well in excess of that which would arise from a film/substrate equil. followed by sequestering of the dissolved **surfactant**. Sequestering involves the formation of **surfactant:cyclodextrin** complexes, probably 1:1, with the **surfactant** alkane chain immersed in the hydrophobobic cavity of the **cyclodextrin**. The .gamma.-**cyclodextrin**, in spite of its larger cavity, failed to sequester a detectable amt. of **surfactant** over a period of one hour under conditions favorable for sequestering by either .alpha.- or .beta.-**cyclodextrin**. This is explained in terms of the .gamma.-**cyclodextrin** cavity being effectively

less hydrophobic. The rate of insol. **surfactant** sequestration decreases with the formation of a liq.-condensed as opposed to a liq.-expanded film state, with increasing alkane-chain length of the **surfactant**, and with chain branching. **Mols**. with 2 chains, such as lecithins, were not sequestered, but cholesterol with a similar cross-sectional area/ **mol**. did show a weak interactive coupling with .beta.-**cyclodextrin** at < 30.degree.. Based on the obsd. increased areas/**mol**., this latter interaction brought .beta.-**cyclodextrin** into the air/water interface rather than **removing** cholesterol, indicating the "complex" still possessed substantial hydrophobicity.

IT **7585-39-9**, .beta.-**Cyclodextrin** **10016-20-3**, .alpha.-**Cyclodextrin**
RL: PRP (Properties)
(sequestering by, of **surfactants** from insol. monolayers at air-water interface)

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, CIN, CEN, PROMT, CBNB' ENTERED AT 14:30:27 ON 05 AUG 2002)

L10 45 S L9
L11 39 DUP REM L10 (6 DUPLICATES REMOVED)

L11 ANSWER 1 OF 39 PROMT COPYRIGHT 2002 Gale Group

ACCESSION NUMBER: 2002:131983 PROMT
TITLE: Raw materials. (Blue Book 2002).(for the soap and cosmetics industry)(Directory)
SOURCE: Soap & Cosmetics, (Jan 2002) Vol. 78, No. 1, pp. 112(20).
ISSN: 1523-9225.
PUBLISHER: Chemical Week Associates
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 9936
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB ABRASIVES AND FILLERS
THIS IS THE FULL TEXT: COPYRIGHT 2002 Chemical Week Associates

Subscription: $60.00 per year. Published monthly.

L11 ANSWER 2 OF 39 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 2002-294096 [34] WPIDS
DOC. NO. CPI: C2002-086522
TITLE: Reduction of odor in process involves contacting **cyclodextrin** with first stream of material prior to contact with second stream of material, or with second stream of material prior to dispersing second stream in atmosphere.
DERWENT CLASS: D22 E19 J01 P34
INVENTOR(S): DEMEYERE, H J M; DEPAUW, J; DUVAL, D L; TRINH, T; UCHIYAMA, H; WOO, R A
PATENT ASSIGNEE(S): (PROC) PROCTER & GAMBLE CO
COUNTRY COUNT: 29
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG

EP 1184069 A2 20020306 (200234)* EN 9 ← check refs. in this
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK
NL PT RO SE SI TR
AU 2001059915 A 20020221 (200234)
CA 2355438 A1 20020218 (200234) EN
ZA 2001006789 A 20020424 (200237) 16

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1184069	A2	EP 2001-870178	20010817
AU 2001059915	A	AU 2001-59915	20010816
CA 2355438	A1	CA 2001-2355438	20010817
ZA 2001006789	A	ZA 2001-6789	20010816

PRIORITY APPLN. INFO: US 2000-226376P 20000818
AN 2002-294096 [34] WPIDS
AB EP 1184069 A UPAB: 20020528
NOVELTY - Odor in a process is reduced by contacting **cyclodextrin** with a first stream of material prior to contact with a second stream of material; or contacting **cyclodextrin** with the second stream of material prior to dispersing of the second stream of material into the atmosphere.

DETAILED DESCRIPTION - Reduction of odor in a process comprises:

(a) production of a first stream of material which contains odorous **molecules**;

(b) contacting a second stream of material with the first stream under conditions such that odorous **molecules** are transferred from the first stream to the second stream; and

(c) dispersing the second stream to the atmosphere.

Cyclodextrin is contacted with the first stream prior to contact of the first stream with the second stream; or **cyclodextrin** is contacted with the second stream prior to dispersing of the second stream into the atmosphere. The odor in the second stream is reduced relative to odor in the second stream resulting from a method that lacks the step of contacting with **cyclodextrin**.

An INDEPENDENT CLAIM is also included for a method of reducing volatile organic compound emissions.

USE - For reducing odor in a process, particularly in an industrial process. The method is also useful in **removing** non-malodorous and non-odorous volatile organic compounds with the use of **cyclodextrin** (claimed).

ADVANTAGE - The inventive method reduces or entirely eliminates the malodor problems, which arise when air or other gas streams are contacted with waste process waters or other liquid streams before release of the gas stream into the atmosphere.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic diagram of a system in which the inventive method is used.

Waste process water 1
Gaseous stream 3
Cyclodextrin 6
Liquid stream 8
Dwg.1/1

L11 ANSWER 3 OF 39 PROMT COPYRIGHT 2002 Gale Group

ACCESSION NUMBER: 2001:426355 PROMT
TITLE: The Skin Care Market.
AUTHOR(S): Pianoforte, Kerry
SOURCE: Household & Personal Products Industry, (May 2001) Vol. 38, No. 5, pp. 112.
ISSN: 0090-8878.
PUBLISHER: Rodman Publications, Inc.
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 7882
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB Today's skin care market offers something for everyone as products are becoming increasingly customized to meet individual needs.
THIS IS THE FULL TEXT: COPYRIGHT 2001 Rodman Publications, Inc.

Subscription: $48.00 per year. Published monthly. 17 S. Franklin Turnpike, Box 555, Ramsey, NJ 07446.

L11 ANSWER 4 OF 39 PROMT COPYRIGHT 2002 Gale Group

ACCESSION NUMBER: 2001:268760 PROMT
TITLE: A Perspective on the History of and Current Research in **Surfactant**-Modified, Water-Soluble Polymers.
AUTHOR(S): Glass, J. Edward
SOURCE: The Journal of Coatings Technology, (Feb 2001) Vol. 73, No. 913, pp. 79.
ISSN: 0361-8773.
PUBLISHER: Federation of Societies for Coatings Technology
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 15677
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB North Dakota State University [*]
THIS IS THE FULL TEXT: COPYRIGHT 2001 Federation of Societies for Coatings Technology

Subscription: $40.00 per year. Published monthly. 492 Norristown Road, Blue Bell, PA 19422.

L11 ANSWER 5 OF 39 PROMT COPYRIGHT 2002 Gale Group

ACCESSION NUMBER: 2001:258216 PROMT
TITLE: Formulating Car Care Products.
AUTHOR(S): Arif, Shoaib
SOURCE: Household & Personal Products Industry, (March 2001) Vol. 38, No. 3, pp. 60.
ISSN: 0090-8878.
PUBLISHER: Rodman Publications, Inc.
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 5457
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB Here's a wide range of formulation ideas to rev up your product introductions

Subscription: $48.00 per year. Published monthly. 17 S. Franklin Turnpike, Box 555, Ramsey, NJ 07446.

L11 ANSWER 6 OF 39 PROMT COPYRIGHT 2002 Gale Group

ACCESSION NUMBER: 2002:88289 PROMT
TITLE: Special Delivery : Sophisticated delivery system technology makes all the difference for formulators.(overview of companies offering cosmetics with liposomes and similar drug delivery systems)(Industry Overview)
AUTHOR(S): ROSEN, MEYER R.
SOURCE: Global Cosmetic Industry, (Oct 2001) Vol. 169, No. 5, pp. 24.
ISSN: 1523-9470.
PUBLISHER: Allured Publishing Corp.
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 1217
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB This second part of a two-part series on delivery systems delves into the mysteries of liposomes, silicone vesicles, microencapsulation, molecular encapsulation, and bioadhesive nanospheres.

Subscription: $40.00 per year. Published monthly.

L11 ANSWER 7 OF 39 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 2002-082987 [11] WPIDS
DOC. NO. NON-CPI: N2002-061849
DOC. NO. CPI: C2002-025136
TITLE: Composition for **capturing** unwanted **molecules** from surfaces, e.g. fabrics and skin, contains functionally-available **cyclodextrin**, and **cyclodextrin** -incompatible material.
DERWENT CLASS: A87 A96 A97 D21 D25 E13 F06 P34
INVENTOR(S): DUVAL, D L; REECE, S; UCHIYAMA, H; WOO, R A; COBB, D S; DU VAL, D L; STICKNEY, J C O
PATENT ASSIGNEE(S): (DUVA-I) DUVAL D L; (REEC-I) REECE S; (UCHI-I) UCHIYAMA H; (WOOR-I) WOO R A; (COBB-I) COBB D S; (STIC-I) STICKNEY J C O A; (PROC) PROCTER & GAMBLE CO
COUNTRY COUNT: 95
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001088076	A1	20011122	(200211)*	EN	62

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO

check ref. in this.

Searcher : Shears 308-4994

NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN
YU ZA ZW
US 2002007055 A1 20020117 (200212)
US 2002010106 A1 20020124 (200214)
US 2002010154 A1 20020124 (200214)
AU 2001061403 A 20011126 (200222)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001088076 A1		WO 2001-US15164	20010510
US 2002007055 A1	Provisional	US 2000-204163P	20000515
		US 2001-855440	20010515
US 2002010106 A1	Provisional	US 2000-204161P	20000515
		US 2001-855816	20010515
US 2002010154 A1	Provisional	US 2000-204162P	20000515
		US 2001-855337	20010515
AU 2001061403 A		AU 2001-61403	20010510

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001061403 A	Based on	WO 200188076

PRIORITY APPLN. INFO: US 2000-257848P 20001221; US 2000-204161P 20000515; US 2000-204162P 20000515; US 2000-204163P 20000515; US 2001-855440 20010515; US 2001-855816 20010515; US 2001-855337 20010515

AN 2002-082987 [11] WPIDS

AB WO 200188076 A UPAB: 20020215

NOVELTY - A composition comprises a functionally-available **cyclodextrin**; and a **cyclodextrin**-incompatible material. The **cyclodextrin**-incompatible material is not a perfume material. The concentration of functionally-available **cyclodextrin** is at least 0.001%, preferably at least 0.01%.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(A) a process of manufacturing the composition for **capturing** unwanted **molecules**, comprising providing a **cyclodextrin**, a **cyclodextrin**-compatible **surfactant**, and a **cyclodextrin**-incompatible material; combining the **cyclodextrin**-compatible **surfactant** and the **cyclodextrin**-incompatible material to form a first mixture; and subsequently combining the **cyclodextrin** with the first mixture to form the composition for **capturing** unwanted **molecules**;

(B) a method of **removing** unwanted **molecules** from a surface, comprising applying to the surface the above composition; and allowing the composition to dry; and

(C) a cleaning method, comprising applying the above composition to an article or articles to be cleaned.

USE - The inventive composition is used for **capturing** unwanted **molecules** from inanimate surfaces including fabrics (claimed), carpets and household surfaces (e.g., countertops, dishes, floors, garbage cans, ceilings, walls, carpet

padding and air filters), and from animate surfaces including skin and hair. It is suitable for a variety of applications, including but not limited to, laundry detergent composition, fabric softening composition, hard surface cleaning compositions, dishwashing detergent compositions, malodor controlling compositions, shampoo compositions, hair conditioner compositions, personal cleansing compositions, and underarm deodorant compositions. It is used for controlling odor on fabrics.

ADVANTAGE - The inventive composition provides a scent signal in the form of a pleasant odor which imparts a freshness impression to the treated surface, and can serve as a signal for **capturing** of the unwanted **molecules**, e.g. malodorous **molecules**, from the treated surfaces, e.g. fabrics. When the surfaces are treated with the inventive composition, the functionally-available **cyclodextrin** complexes with the unwanted **molecules**, thus effectively **removing** and reducing the presence of the unwanted **molecules** on the treated surfaces. The **cyclodextrin** -compatible **surfactants** provide a low surface tension that permits the composition to spread more easily and more uniformly on hydrophobic surfaces, e.g. polyester and nylon. The spreading of the composition also allows its to dry faster, so that the treated material is ready to use sooner. Further, the composition containing the **cyclodextrin**-compatible **surfactant** can penetrate hydrophobic, oily soil better for improved reduction or **removal** of those types of unwanted **molecules**.

Dwg.0/0

L11 ANSWER 8 OF 39 WPIDS (C) 2002 THOMSON DERWENT

ACCESSION NUMBER: 2002-082950 [11] WPIDS

DOC. NO. NON-CPI: N2002-061839

DOC. NO. CPI: C2002-025104

TITLE: Stable composition, e.g. laundry detergent composition, comprises low-degree of **cyclodextrin** derivative substitution .

DERWENT CLASS: D22 D25 E13 P34

INVENTOR(S): DUVAL, D L; REECE, S; SCHAEFFER, H A; UCHIYAMA, H; WOO, R A; DU VAL, D L

PATENT ASSIGNEE(S): (DUVA-I) DUVAL D L; (REEC-I) REECE S; (SCHA-I) SCHAEFFER H A; (UCHI-I) UCHIYAMA H; (WOOR-I) WOO R A; (PROC) PROCTER & GAMBLE CO

COUNTRY COUNT: 95

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001087360	A2	20011122	(200211)*	EN	50

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

US 2001056080 A1 20011227 (200211)

AU 2001059725 A 20011126 (200222)

check ref. in this

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001087360 A2		WO 2001-US15202	20010510
US 2001056080 A1	Provisional	US 2000-204164P	20000515
		US 2001-855329	20010515
AU 2001059725 A		AU 2001-59725	20010510

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001059725 A	Based on	WO 200187360

PRIORITY APPLN. INFO: US 2000-204164P 20000515; US 2001-855329 20010515

AN 2002-082950 [11] WPIDS

AB WO 200187360 A UPAB: 20020215

NOVELTY - A stable composition comprises low-degree of **cyclodextrin** derivative substitution.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of manufacturing the stable composition, comprising combining **cyclodextrin**-compatible **surfactant** and **cyclodextrin**-incompatible **surfactant** to form a first mixture, and subsequently combining the low-degree **cyclodextrin** substitution with the first mixture.

USE - The composition can be laundry detergent composition, fabric softening composition, shampoo composition, hard surface cleaning composition, dishwashing detergent composition, malodor controlling composition, hair conditioner composition, personal cleansing composition, or underarm deodorant composition. It is used for **capturing** unwanted **molecules** from inanimate surfaces, e.g. fabrics (carpets) and households surfaces (countertops, dishes, floors, garbage cans, ceilings, walls, carpet padding, or air filters); and animate surfaces, e.g. skin and hair. It can also be used in cabinet-type or bag-type apparatus for conditioning garments.

ADVANTAGE - Composition exhibits improved performance in **capturing** or **removing** unwanted malodorous **molecules**.

Dwg.0/0

L11 ANSWER 9 OF 39 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 2001:993884 SCISEARCH
THE GENUINE ARTICLE: 501BY
TITLE: Synthesis of mesoporous titanium dioxide materials by using a mixture of organic compounds as a non-**surfactant** template
AUTHOR: Zheng J Y; Pang J B; Qiu K Y (Reprint); Wei Y
CORPORATE SOURCE: Peking Univ, Coll Chem & Mol Engn, Dept Polymer Sci & Engn, Beijing 100871, Peoples R China (Reprint); Drexel Univ, Dept Chem, Philadelphia, PA 19104 USA
COUNTRY OF AUTHOR: Peoples R China; USA
SOURCE: JOURNAL OF MATERIALS CHEMISTRY, (SEP 2001) Vol. 11, No. 12, pp. 3367-3372.
Publisher: ROYAL SOC CHEMISTRY, THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD,, CAMBRIDGE CB4 0WF, CAMBS, ENGLAND.

ISSN: 0959-9428.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 38

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Mesoporous titanium dioxide materials have been successfully prepared at ambient temperature via HCl-catalyzed hydrolysis and polycondensation reactions of titanium(IV) n-butoxide by employing a mixture of beta -**cyclodextrin** (CD) and urea (U) as a non-**surfactant** template, followed by **removal** of the mixture with water extraction. FT-IR analysis demonstrates the complete **removal** of the template **molecules** after extraction with water. The characterization results of nitrogen adsorption-desorption measurements show that the obtained materials have type IV isotherms with H2 hysteresis loops. The BJH pore size distribution plots indicate that the pore sizes show no obvious changes with the decrease in weight ratio of CD/U (3.7-4.1 nm) or increase in template content (3.9-3.6 nm). The interactions induced by hydrogen bonding between these two **molecules** and inorganic species play important roles in the above results. Small- and large-angle powder X-ray diffraction patterns and transmission electron microscopy reveal that the afforded titanium dioxide materials have anatase structures as well as disordered pore structures.

L11 ANSWER 10 OF 39 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 2000-490961 [43] WPIDS
DOC. NO. CPI: C2000-147516
TITLE: Analyzing samples for target nucleic acids using probes labeled with chromophoric groups capable of forming exciplexes after photo-irradiation.
DERWENT CLASS: A14 A96 B04 D16
INVENTOR(S): BICHENKOVA, E V; DOUGLAS, K T
PATENT ASSIGNEE(S): (UYMA-N) UNIV VICTORIA MANCHESTER
COUNTRY COUNT: 91
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000040751	A2	20000713	(200043)*	EN	58
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2000018674	A	20000724	(200052)		
EP 1141393	A2	20011010	(200167)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000040751	A2	WO 1999-GB4207	19991220
AU 2000018674	A	AU 2000-18674	19991220
EP 1141393	A2	EP 1999-962294	19991220

WO 1999-GB4207 19991220

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000018674	A	Based on	WO 200040751
EP 1141393	A2	Based on	WO 200040751

PRIORITY APPLN. INFO: GB 1998-27912 19981219
AN 2000-490961 [43] WPIDS
AB WO 200040751 A UPAB: 20000907
NOVELTY - A method (I) of analyzing a sample for the presence of a target nucleic acid sequence, comprising hybridizing 2 adjacent probes adapted to bind to adjacent, mutually exclusive regions of target sequence (if present). Each of the probes comprises a different chromophoric group which are capable of forming a detectable exciplex after photo-irradiation if the probes are hybridized.

DETAILED DESCRIPTION - A method (I) of analyzing a sample to detect the presence of a target polynucleotide sequence, comprising:

(1) treating the sample under hybridizing conditions with:

(a) a polynucleotide probe (P1) having a 5'-terminal nucleotide labeled with a chromophoric group (Cg1) able on photo-irradiation to form a complex with a second chromophoric group (Cg2); and

(b) a second polynucleotide probe (P2) labelled at its 3'-terminal nucleotide with a second chromophoric group (Cg2) ((P1) and (P2) are adapted to bind mutually exclusive regions of the target sequence so that the chromophoric groups are at the proximal ends of the probes and are able to form a complex which is detectably different from (Cg1) and (Cg2));

(2) effecting photo-irradiation to cause complex formation; and

(3) detecting the formation of the complex.

Cg1 and Cg2 are different from each other and are capable of forming an exciplex as the detectable compound and they form the exciplex relationship in a localized region of greater hydrophobicity than the bulk phase of the sample being tested.

USE - (I) is used to detect target nucleic acid sequences in samples.

ADVANTAGE - (I) has the following advantages:

(1) the exciplex partners are held close to each other in a mutually hydrophobic, low polarity environment favoring exciplex emission;

(2) the system is ridgedly defined and is an example of an intramolecular system that favors exciplex emission in an extended range of solvent polarities;

(3) it is possible to incorporate into the exciplex partners atoms, components that provide hydrogen bond donors and/or hydrogen bond acceptors and therefore achieve added recognition and complex stability by hydrogen bonding to base pairs of the target strand, especially in those cases where a gap of 1-2 (or more) base pairs have been incorporated;

(4) the arrangement can be achieved by stacking interactions such as those used in native B-DNA or by enforcing the exciplex partners to lie alongside each other in minor or major grooves; and

(5) the heterocyclic base unit of the innermost nucleotide units of the probes of the binary system can be replaced by suitably modified analogs which are the exciplex partners.

Dwg.0/12

L11 ANSWER 11 OF 39 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 2000:155075 SCISEARCH
THE GENUINE ARTICLE: 285XA
TITLE: Effect of the presence of beta-**cyclodextrin** on the solution behavior of procaine hydrochloride. Spectroscopic and thermodynamic studies
AUTHOR: Merino C; Junquera E; JimenezBarbero J; Aicart E (Reprint)
CORPORATE SOURCE: UNIV COMPLUTENSE MADRID, FAC CIENCIAS QUIM, DEPT QUIM FIS 1, MADRID 28040, SPAIN (Reprint); UNIV COMPLUTENSE MADRID, FAC CIENCIAS QUIM, DEPT QUIM FIS 1, MADRID 28040, SPAIN; CSIC, INST QUIM ORGAN, DEPT QUIM ORGAN BIOL, MADRID 28006, SPAIN
COUNTRY OF AUTHOR: SPAIN
SOURCE: LANGMUIR, (22 FEB 2000) Vol. 16, No. 4, pp. 1557-1565.
Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036.
ISSN: 0743-7463.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: PHYS
LANGUAGE: English
REFERENCE COUNT: 51

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The effect of the addition of beta-**cyclodextrin** (CD) to the aqueous solutions of the local anesthetic drug, procaine hydrochloride, has been fully investigated by means of spectroscopic (UV-vis, steady-sate fluorescence, and NMR) and thermodynamic (density and speed of sound) studies. The global picture of the results indicates that procaine hydrochloride penetrates the CD cavity by the wider ring, -NH2 group end first, allowing up to the aromatic ring of the drug inside the cavity, with a 1:1 stoichiometry. A new model has been proposed to determine binding constants from UV-vis spectra, when the addition of CD provokes a wavelength shift instead of an absorbance increase. The association constant, obtained from both emission fluorescence and UV-vis data, ranges from 400 to 200 M-1, on going from 15 to 40 degrees C. A linear decrease of the affinity of the **cyclodextrin** by the drug with temperature drives the enthalpy (Delta H degrees = -19 +/- 5 kJ **mol**(-1)) and the entropy (Delta S degrees = -15 +/- 7 J K-1 **mol**(-1)) changes of the binding process to negative values. These values indicate that the encapsulation of procaine hydrochloride by beta-**cyclodextrin** is an exothermic and enthalpy governed process, with a balance between van der Waals contacts, hydrophobic effect, and solvent reorganization being mainly responsible for the overall stability of the complex. The thermodynamic study has shown that in the reorganization of water **molecules** after the association of the CD and the drug, four to five water **molecules** are expelled from the CD cavity and four to five water **molecules** are **removed** from the hydration shell of procaine.

L11 ANSWER 12 OF 39 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 1
ACCESSION NUMBER: 2001:9765 BIOSIS
DOCUMENT NUMBER: PREV200100009765

TITLE: Hydrocarbon degradation by a soil microbial population with beta-**cyclodextrin** as **surfactant** to enhance bioavailability.
AUTHOR(S): Bardi, L.; Mattei, A.; Steffan, S.; Marzona, M. (1)
CORPORATE SOURCE: (1) Dipartimento di Chimica Generale ed Organica Applicata, Corso Massimo D'Azeglio, 48, 10125, Torino: Marzona@ch.unito.it Italy
SOURCE: Enzyme and Microbial Technology, (November 15, 2000) Vol. 27, No. 9, pp. 709-713. print.
ISSN: 0141-0229.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

AB In general the biodegradation of nonchlorinated aliphatic and aromatic hydrocarbons is influenced by their bioavailability. Hydrocarbons are very poorly soluble in water. They are easily adsorbed to clay or humus fractions in the soil, and pass very slowly to the aqueous phase, where they are metabolised by microorganisms. **Surfactants** that increase their solubility and improve their bioavailability can thereby accelerate degradation. **Cyclodextrins** are natural compounds that form soluble complexes with hydrophobic **molecules**. They are widely used in medicine and harmless to microorganisms and enzymes. This paper desribes their in vitro effect on the biodegradative activity of a microbial population **isolated** from a petroleum-polluted soil, as shown by the decrease of dodecane (C12), tetracosane (C24) anthracene and naphthalene added individually as the sole carbon source to mineral medium lipid cultures. beta-**cyclodextrin** accelerated the degradation of all four hydrocarbons, particularly naphthalene, and influenced the growth kinetics as shown by a higher biomass yield and better utilization of hydrocarbon as a carbon and energy source. Its low cost, biocompatibility and effective acceleration of degradation make beta-**cyclodextrin** an attractive option for bioremediation.

L11 ANSWER 13 OF 39 CEN COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:243 CEN
TITLE: The Right Chemistry For Fragile Frescoes
SOURCE: Chemical & Engineering News, (24 Jan 2000) Vol. 78, No. 4, pp. 35.
CODEN: CENEAR, ISSN: 0009-2347.
PUBLISHER: American Chemical Society
LANGUAGE: English
WORD COUNT: 5381

L11 ANSWER 14 OF 39 CEN COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:569 CEN
TITLE: Goldschmidt Arrives On **Surfactant** Scene
Company exploits expertise in understanding processes at interfaces
SOURCE: Chemical & Engineering News, (28 Feb 2000) Vol. 78, No. 9, pp. 27.
CODEN: CENEAR, ISSN: 0009-2347.
PUBLISHER: American Chemical Society
LANGUAGE: English
WORD COUNT: 1884

L11 ANSWER 15 OF 39 PROMT COPYRIGHT 2002 Gale Group

ACCESSION NUMBER: 1999:93984 PROMT
TITLE: Facial skin care: Cleansers move forward.
AUTHOR(S): BRANNA, TOM
SOURCE: European Cosmetic Markets, (Feb 1999) Vol. 16, No. 2, pp. 57(1).
ISSN: 0957-1515.
PUBLISHER: Wilmington Publishing Ltd.
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 12681
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB MARKET SUMMARY: On the whole the facial skin care market has been enjoying growth across the Big 5 markets in the last year. However, the big surprise is that unlike other years when sales increases have been mainly boosted by innovations in moisturisers, particularly anti-ageing products, much of this year's growth was fuelled by the latest developments in the cleansing category, namely cosmetic tissues and deep cleansing patches. Growth in these two areas has prompted many manufacturers to launch such products and in turn this has fuelled further gains. These categories are still immature and so rapid growth is likely to continue over the next few years. In the moisturiser category, key ingredients incorporated in new formulas included vitamins and enzymes.
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L11 ANSWER 16 OF 39 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 2
ACCESSION NUMBER: 1999:209536 BIOSIS
DOCUMENT NUMBER: PREV199900209536
TITLE: **Cyclodextrin**-enhanced solubilization and **removal** of residual-phase chlorinated solvents from porous media.
AUTHOR(S): Boving, Thomas B.; Wang, Xiaojiang; Brusseau, Mark L. (1)
CORPORATE SOURCE: (1) Hydrology and Water Resources Department and Soil, Water and Environmental Science Department, University of Arizona, Tucson, AZ, 85711 USA
SOURCE: Environmental Science & Technology, (March 1, 1999) Vol. 33, No. 5, pp. 764-770.
ISSN: 0013-936X.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

AB The development of improved methods for remediation of contaminated aquifers has emerged as a significant environmental priority. One technology that appears to have considerable promise involves the use of solubilization agents such as **surfactants** and cosolvents for enhancing the **removal** of residual phase immiscible liquids. We examined herein the use of

cyclodextrin, a glucose-based **molecule**, for solubilizing and **removing** residual-phase immiscible liquid from porous media. Batch experiments were conducted to measure the degree of trichloroethene (TCE) and tetrachloroethene (PCE) solubilization induced by hydroxypropyl-beta-**cyclodextrin** (HPCD) and methyl-beta-**cyclodextrin** (MCD). These studies revealed that the solubilities of TCE and PCE were enhanced by up to 9.5 and 36.0 times, respectively. Column experiments were conducted to compare water and **cyclodextrin**-enhanced flushing of Borden sand containing residual saturations of TCE and PCE. The results indicate that solubilization and mass **removal** were enhanced substantially with the use of **cyclodextrins**. The effluent concentrations during the steady-state phase of the HPCD (5% and 10%) and MCD (5%) flushing experiments were close to the apparent solubilities measured with the batch experiments, indicating equilibrium concentrations were maintained during the initial phase of **cyclodextrin** flushing. Mobilization was observed for only the TCE-MCD (5% and 10%) and PCE-5%MCD experiments.

L11 ANSWER 17 OF 39 CEN COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:379 CEN
TITLE: Nanoporous Polymers Have A Thing For Organics
Cyclodextrin-based polymers can **remove** compounds such as trichloroethylene from water
SOURCE: Chemical & Engineering News, (1 Feb 1999) Vol. 77, No. 5, pp. 32.
CODEN: CENEAR, ISSN: 0009-2347.
PUBLISHER: American Chemical Society
LANGUAGE: English
WORD COUNT: 6396

L11 ANSWER 18 OF 39 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 1999-060004 [05] WPIDS
DOC. NO. CPI: C1999-017795
TITLE: Controlling environmental malodours on skin - using composition comprising uncomplexed **cyclodextrin**, aqueous carrier, hydrophilic volatile perfume and optionally oil phase and **surfactant**(s).
DERWENT CLASS: A96 D21 E13
INVENTOR(S): BARTOLO, R G; DODD, M T; LUCAS, J M; TRINH, T
PATENT ASSIGNEE(S): (PROC) PROCTER & GAMBLE CO
COUNTRY COUNT: 83
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9856341	A1	19981217	(199905)*	EN	31
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW					
US 5861147	A	19990119	(199911)		

AU 9878257	A	19981230	(199920)
US 5942214	A	19990824	(199941)
NO 9906055	A	20000204	(200017)
EP 991401	A1	20000412	(200023) EN
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE			
CZ 9904413	A3	20000517	(200031)
BR 9809995	A	20000801	(200043)
CN 1261785	A	20000802	(200058)
JP 2001506276	W	20010515	(200133) 37
HU 2000004525	A2	20010628	(200143)
KR 2001013612	A	20010226	(200154)
MX 9911492	A1	20010601	(200235)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9856341	A1	WO 1998-US11812	19980608
US 5861147	A	US 1997-871791	19970609
AU 9878257	A	AU 1998-78257	19980608
US 5942214	A	US 1997-871166	19970609
NO 9906055	A	WO 1998-US11812	19980608
		NO 1999-6055	19991208
EP 991401	A1	EP 1998-926413	19980608
		WO 1998-US11812	19980608
CZ 9904413	A3	WO 1998-US11812	19980608
		CZ 1999-4413	19980608
BR 9809995	A	BR 1998-9995	19980608
		WO 1998-US11812	19980608
CN 1261785	A	CN 1998-806859	19980608
JP 2001506276	W	WO 1998-US11812	19980608
		JP 1999-503031	19980608
HU 2000004525	A2	WO 1998-US11812	19980608
		HU 2000-4525	19980608
KR 2001013612	A	KR 1999-711622	19991209
MX 9911492	A1	MX 1999-11492	19991209

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9878257	A	Based on	WO 9856341
EP 991401	A1	Based on	WO 9856341
CZ 9904413	A3	Based on	WO 9856341
BR 9809995	A	Based on	WO 9856341
JP 2001506276	W	Based on	WO 9856341
HU 2000004525	A2	Based on	WO 9856341

PRIORITY APPLN. INFO: US 1997-871791 19970609; US 1997-871166 19970609

AN 1999-060004 [05] WPIDS

AB WO 9856341 A UPAB: 19990210

A use, in the manufacture of a malodour absorbing composition, of a composition as an active ingredient in controlling environmental malodours on skin by applying the composition to the skin. The composition comprises (wt%):(a) 0.1-5% of solubilised uncomplexed **cyclodextrin**; (b) an aqueous carrier; (c) 0.1-36% of an oil phase selected from emollients, moisturisers and skin protectants;

(d) **surfactant**(s); and 0.004-2% of a hydrophilic, volatile perfume composition.

Preferably the composition is deposited on a wipe which comprises a flexible dispensing means.The perfume composition comprises at least 5 different hydrophilic, volatile perfume ingredients comprising at least 50wt% and in which each ingredient has a b. pt. of 260 deg. C or lower, and a ClogP of less than 3.5. The **surfactant**(s) has hydrophilic/lipophilic balance of 8-18 and the **surfactant** when combined with an aqueous **cyclodextrin** solution, provides no less than 25 (especially no less than 75)% of a level of odour **capture** as an aqueous **cyclodextrin** solution. The composition also comprises optional component(s) selected from low **mol** wt polyols, hydrophobic antimicrobials, Zn salts, water soluble polymers, soluble carbonate and/or bicarbonate salts, chelating agents, zeolites, activated carbon, and/or water soluble microbial preservatives. The **surfactant** is selected from block copolymers of polyoxyethylene-polyoxypropylene, and/or polyalkylene oxide polysiloxanes.

USE - The odour absorbing composition is useful for controlling environmental malodours on skin and hair, such as from fish, onions, garlic, other spices, cooking odours, smoke, tobacco and gasoline.

ADVANTAGE - The compositions are safe to be used on entire body. The perfume is fleeting and not long lasting on the user's skin and indicates freshness.

Dwg.0/0

L11 ANSWER 19 OF 39 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 1999-060002 [05] WPIDS
DOC. NO. CPI: C1999-017793
TITLE: Odour absorbing composition - comprises solubilised, water soluble, uncomplexed **cyclodextrin**, oil phase comprising emollients, moisturisers and skin protectants, **surfactants**, perfume composition and aqueous carrier.
DERWENT CLASS: A96 D21 D22 E19
INVENTOR(S): BARTOLO, R G; BUCKNER, R Y; DODD, M T; KAJS, T M; LUCAS, J M; TRINH, T
PATENT ASSIGNEE(S): (PROC) PROCTER & GAMBLE CO
COUNTRY COUNT: 83
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9856339	A1	19981217	(199905)*	EN	24
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW					
US 5858335	A	19990112	(199910)		
US 5871719	A	19990216	(199914)		
AU 9880610	A	19981230	(199920)		
US 5928631	A	19990727	(199936)		
NO 9906054	A	20000204	(200017)		
EP 988026	A1	20000329	(200020)	EN	

R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE

CZ 9904410	A3	20000517	(200031)
BR 9810744	A	20000919	(200050)
CN 1261784	A	20000802	(200058)
HU 2000003421	A2	20010228	(200121)
JP 2001506275	W	20010515	(200133)
KR 2001013611	A	20010226	(200154)
MX 9911491	A1	20010701	(200236)

30

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9856339	A1	WO 1998-US11787	19980608
US 5858335	A	US 1997-871860	19970609
US 5871719	A	US 1997-871857	19970609
AU 9880610	A	AU 1998-80610	19980608
US 5928631	A	US 1997-871854	19970609
NO 9906054	A	WO 1998-US11787	19980608
		NO 1999-6054	19991208
EP 988026	A1	EP 1998-928923	19980608
		WO 1998-US11787	19980608
CZ 9904410	A3	WO 1998-US11787	19980608
		CZ 1999-4410	19980608
BR 9810744	A	BR 1998-10744	19980608
		WO 1998-US11787	19980608
CN 1261784	A	CN 1998-806857	19980806
HU 2000003421	A2	WO 1998-US11787	19980608
		HU 2000-3421	19980608
JP 2001506275	W	WO 1998-US11787	19980608
		JP 1999-503014	19980608
KR 2001013611	A	KR 1999-711621	19991209
MX 9911491	A1	MX 1999-11491	19991209

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9880610	A	Based on	WO 9856339
EP 988026	A1	Based on	WO 9856339
CZ 9904410	A3	Based on	WO 9856339
BR 9810744	A	Based on	WO 9856339
HU 2000003421	A2	Based on	WO 9856339
JP 2001506275	W	Based on	WO 9856339

PRIORITY APPLN. INFO: US 1997-871860 19970609; US 1997-871854 19970609; US 1997-871857 19970609

AN 1999-060002 [05] WPIDS

AB WO 9856339 A UPAB: 19990210

An odour absorbing composition comprises:(a) 0.1-5wt% of solubilised, water-soluble, uncomplexed **cyclodextrin**; (b) 0.1-36wt% o an oil phase selected from emollients, moisturisers and akin protectants; (c) **surfactant**(s) having a hydrophilic/lipophilic balance of 8-18 and each **surfactant**, when combined with an aqueous **cyclodextrin** solution, provides no less than 25% a level of odour **capture** as an aqueous **cyclodextrin** solution; and (d) an aqueous carrier.

Also claimed are: (1) a preformed wipe composition comprising

the above composition deposited on a flexible dispensing means; and (2) a process for making the odour absorbing composition comprising: (a) making a mixture by mixing **surfactant**(s), an oil phase, and an aqueous phase until the mixture is homogeneous; and (b) making a second mixture by adding **cyclodextrin** to the mixture with mixing until the **cyclodextrin** dissolves and the mixture is homogeneous.

Preferably the composition is deposited on a flexible dispensing means. The composition also comprises low **mol** wt polyols and comprises antimicrobials selected from hydrophobic (selected from triclosan, triclocarbon, eucalyptol, methyl salicylate and thymol at a level of 0.1-1.5wt%) and water soluble antimicrobials (especially sodium hydroxymethylglycinate). The composition also comprises optional ingredients selected from Zn salts, zeolites, activated carbon, water soluble carbonates and/or bicarbonates. The **surfactant** is selected from block copolymers of polyoxyethylene-polyoxypropylene, and/or polyalkylene oxide polysiloxanes. The **cyclodextrin** is selected from alpha/beta/gamma-**cyclodextrin**, their derivatives, methylated **cyclodextrin**, hydroxypropyl beta **cyclodextrin**.

USE - The composition is useful for the manufacture of odour absorbing compositions which are safe for use on skin. The composition is applied to the skin, for reducing body odour, vaginal odour and/or environmental odours.

ADVANTAGE - The composition is free of astringent antiperspirants and is capable of absorbing a broad spectrum of body odours that are not fully suppressed by other means. The composition can be applied to the entire body and is safe.

Dwg.0/0

L11 ANSWER 20 OF 39 MEDLINE

ACCESSION NUMBER:	1998291858 MEDLINE
DOCUMENT NUMBER:	98291858 PubMed ID: 9629906
TITLE:	Mixed-mode separation of polycyclic aromatic hydrocarbons (PAHs) in electrokinetic chromatography.
AUTHOR:	Luong J H; Guo Y
CORPORATE SOURCE:	Biotechnology Research Institute, National Research Council Canada, Montreal, Quebec.. john.luong@nrc.ca
SOURCE:	ELECTROPHORESIS, (1998 May) 19 (5) 723-30. Journal code: 8204476. ISSN: 0173-0835.
PUB. COUNTRY:	GERMANY: Germany, Federal Republic of
DOCUMENT TYPE:	Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:	English
FILE SEGMENT:	Priority Journals
ENTRY MONTH:	199808
ENTRY DATE:	Entered STN: 19980828 Last Updated on STN: 19980828 Entered Medline: 19980818

AB A mixed-mode separation technique has been developed and optimized for the separation of the 16 Environmental Protection Agency (EPA) priority polycyclic aromatic hydrocarbons (PAHs). The procedure utilized two different buffer additives as pseudo-stationary phases with different selectivities towards the analytes. Sodium dioctyl sulfosuccinate (DOSS) displayed selectivities for PAHs which were somewhat similar to the C18 phase in reversed-phase high performance liquid chromatography (HPLC). High acetonitrile content required for an effective separation prevented the formation of micelles as

confirmed by fluorescence spectroscopy. Consequently, the separation could be attributed to the solvophobic association of the PAH **molecules** with hydrophobic chains of the DOSS **surfactant**. In another mode of separation, sulfobutylether-beta-**cyclodextrin** (SB-beta-CD) separated the 16 PAHs on the formation of inclusion complexes with the PAHs, and exhibited different selectivities for the PAHs compared to DOSS. SB-beta-CD and DOSS were then combined in the running buffer to form a mixed pseudo-stationary phase for the separation of the 16 PAHs. Due to the different selectivities of SB-beta-CD and DOSS for the PAHs, the separation of the 16 PAHs was appreciably improved compared to that using DOSS or SB-beta-CD alone. All the 16 PAHs were baseline-resolved using an optimized running buffer containing 22.5 mM DOSS, 15 mM SB-beta-CD, 15% acetonitrile and 5 mM hydroxypropyl-beta-**cyclodextrin** in 6 mM borate at pH 9.

L11 ANSWER 21 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 3

ACCESSION NUMBER: 1998159751 EMBASE
TITLE: Amphiphilic **cyclodextrin** nanospheres: Particle solubilization and reconstitution by the action of a non-ionic detergent.
AUTHOR: Lemos-Senna E.; Wouessidjewe D.; Duchene D.; Lesieur S.
CORPORATE SOURCE: S. Lesieur, Laboratoire de Physico-Chimie, Universite Paris-Sud, Faculte de Pharmacie, 5 rue J.B. Clement, 92296 Chatenay Malabry, Cedex, France
SOURCE: Colloids and Surfaces B: Biointerfaces, (15 Apr 1998) 10/5 (291-301).
Refs: 20
ISSN: 0927-7765 CODEN: CSBBEQ
PUBLISHER IDENT.: S 0927-7765(98)00010-1
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 028 Urology and Nephrology
LANGUAGE: English
SUMMARY LANGUAGE: English

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AB **Cyclodextrin** nanospheres are a new type of colloidal carrier system that has been intensively studied in the area of pharmacotechnical aspects of drug association. However, the physical stability of this carrier has rarely been investigated, mainly towards the presence of another amphiphilic **molecule** in its environment. In this work, the first results relating to the action of solubilizing **surfactants** on nanospheres prepared from the amphiphilic 2,3- di-O-hexanoyl cyclomaltooctaose [.gamma.CDC6, average molar degree of substitution (MDS) = 6.25] are described using n-octyl-.beta.-D-glucopyranoside (OG) as the model. Solubilization experiments were performed by continuous addition of OG into nanosphere suspensions and it was demonstrated that, at a given critical ratio, this non-ionic detergent disrupts the spherical structure of the initial particles. The evidence of the .gamma.CDC6-OG mixed micelle formation was provided by changes in the turbidity of suspensions with OG addition and by TEM micrographs. Reconstitution of the particles was performed by two detergent **removal** procedures: water dilution of micellar solutions and detergent dialysis. In both cases, the formation of new aggregates was demonstrated by changes in the turbitity of the initial mixed micelles. TEM micrographs revealed reconstituted

nanoparticles. The QELS size and the shape of the particles was dependent on the rate of detergent **removal**, but not on the initial .gamma.CDC6 and OG concentrations: fast OG elimination led to the most regular spherical shapes. Finally, the entrapment upon detergent **removal** of the hydrophobic drug progesterone previously dissolved in the mixed micelles was investigated. In conclusion, all the results demonstrated that detergents can interact with nanospheres in a reversible process. These results will be very useful in stability studies, and also in the pharmacotechnical development of nanospheres constituted by amphiphilic **cyclodextrins**.

L11 ANSWER 22 OF 39 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 1998:850649 SCISEARCH
THE GENUINE ARTICLE: 134PX
TITLE: Control fouling and cleaning procedures of UF membranes by a streaming potential method
AUTHOR: Pontie M (Reprint); DurandBourlier L; Lemordant D; Laine J M
CORPORATE SOURCE: ECOLE NATL SUPER CHIM PARIS, CNRS UMR 7575, LAB ELECTROCHIM & CHIM ANALYT, F-75231 PARIS 05, FRANCE (Reprint); CIRSEE, F-78230 LE PECQ, FRANCE; FAC SCI & TECH TOURS, EA 2098, PIMIR, F-37200 TOURS, FRANCE
COUNTRY OF AUTHOR: FRANCE
SOURCE: SEPARATION AND PURIFICATION TECHNOLOGY, (27 AUG 1998) Vol. 14, No. 1-3, pp. 1-11.
Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS.
ISSN: 1383-5866.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: ENGI
LANGUAGE: English
REFERENCE COUNT: 45

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The impact of cleaning procedures on organic ultrafiltration (UF) membranes has been studied in terms of permeability, streaming potential (SP) and wettability. SP measurements of UF membranes are realised using a new design. This new design is more convenient to determine the SP for all kinds of modules (planar, hollow fiber, etc.). We used this design to control the efficiency of cleaning procedures. Furthermore, SP is used to determine the isoelectric points (IEPs) of two materials [polyethersulfone (PES) and cellulose triacetate (CTA)]. The IEPs were experimentally determined from SP variations with pH at a given ionic strength (0.001 **mol** 1(-1)). lThe IEPs of both membranes studied are respectively 3.1 and 3.4. The study of the charge origin on the organic membranes showed that the adsorbing ions are those of water itself. In order to model the fouling with natural organic matter and to study the impact of cleaning procedures, the PES membrane was first modified by the surface adsorption of **surface active** agents (SAAs). For this purpose, a neutral (Triton X100, TX100) and a cationic [dodecyltrimethylammonium (DTAB)] SAA were studied. SAAs were used at a concentration in solution near that of CMC. The wettability of the fouled and virgin membranes was evaluated by means of contact angle measurements. An increase in the contact angle of a droplet deposited on the fouled membrane was correlated to a decrease in its permeability. Furthermore, the contact angle measurements show the acidic characteristic of the PES material at

low pH. The use of beta-**cyclodextrin**, a well-known host complexing agent for SAAs, was found to present a better efficiency to **remove** neutral SAAs than cationic SAAs, which are strongly bonded to the negatively charged PES membrane. The impact of cleaning procedures on CTA membranes fouled with Seine River water was evaluated in the light of these SP measurements. It appeared clearly that the streaming potential is a useful tool for the control of the membrane surface charge after cleaning procedures.

L11 ANSWER 23 OF 39 PROMT COPYRIGHT 2002 Gale Group

ACCESSION NUMBER: 2000:436076 PROMT
TITLE: Pharmaceutical Excipients for the Stabilization of Proteins.
AUTHOR(S): Wong, David; Parasrampuria, Jagdish
SOURCE: BioPharm, (Nov 1997) Vol. 10, No. 11, pp. 52. ISSN: 1040-8304.
PUBLISHER: Advanstar Communications, Inc.
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 7177
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB The use of peptides and proteins in medical treatments has become popular as a result of advances in biotechnology. However, their complicated structures make these substances highly susceptible to degradation. This article reviews the basic structures of peptides and proteins, the causes and mechanisms of their degradation, and some possible approaches for improving their stability.
THIS IS THE FULL TEXT:

Subscription: $59.00 per year. Published monthly. 131 West First Street, Duluth, MN 55082.

L11 ANSWER 24 OF 39 CEN COPYRIGHT 2002 ACS

ACCESSION NUMBER: 97:1184 CEN
TITLE: 52nd ACS Northwest Regional Meeting
SOURCE: Chemical & Engineering News, (12 May 1997) Vol. 75, No. 19, pp. 52.
CODEN: CENEAR, ISSN: 0009-2347.
PUBLISHER: American Chemical Society
LANGUAGE: English
WORD COUNT: 3826

L11 ANSWER 25 OF 39 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 97:1285 SCISEARCH
THE GENUINE ARTICLE: VX510
TITLE: Artificial chaperone-assisted refolding of denatured-reduced lysozyme: Modulation of the competition between renaturation and aggregation
AUTHOR: Rozema D; Gellman S H (Reprint)
CORPORATE SOURCE: UNIV WISCONSIN, DEPT CHEM, MADISON, WI 53706 (Reprint); UNIV WISCONSIN, DEPT CHEM, MADISON, WI 53706
COUNTRY OF AUTHOR: USA
SOURCE: BIOCHEMISTRY, (10 DEC 1996) Vol. 35, No. 49, pp.

15760-15771.
Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036.
ISSN: 0006-2960.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 49

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Conditions that promote renaturation of an unfolded protein also promote protein aggregation; in many cases, because these competing intramolecular and intermolecular processes are driven by similar networks of noncovalent interactions. The GroEL/GroES system and related biological chaperones facilitate the renaturation of substrate proteins by minimizing the aggregation pathway. We have devised a two-step method in which small **molecules**, ''artificial chaperones,'' facilitate protein refolding from a chemically denatured state. In the first step, the protein is **captured** by a detergent as guanidinium chloride is diluted to a non-denaturing concentration; formation of a protein-detergent complex prevents both protein aggregation and proper refolding. In the second step, a **cyclodextrin** strips detergent from the protein, allowing the protein to refold. Here we describe the first application of this method to a protein that must form disulfides in the native state. Lysozyme (hen egg white) can be refolded from the Gdm-denatured, DTT-reduced state in good yields at final protein concentrations as high as 1 mg/mL with the artificial chaperone method. Several mechanistic aspects of artificial chaperone-assisted refolding: have been probed, and a detailed mechanism for the kinetically controlled stripping step is proposed.

L11 ANSWER 26 OF 39 PROMT COPYRIGHT 2002 Gale Group

ACCESSION NUMBER: 95:114563 PROMT
TITLE: Haircare highlights
SOURCE: Manufacturing Chemist, (Feb 1995) pp. 27.
ISSN: 0262-4230.
LANGUAGE: English
WORD COUNT: 2056

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB From a study of patents published through 1994, it would appear that every major producer is finding a new way of adding silicone to shampoo. There have been many attempts to improve deposition enabling a reduction in the quantity of silicone in a formula whilst not contravening other patents.

A patent filed by Unilever(1) claims a haircare composition comprising of a perfluoropolyether material plus a silicone conditioning agent. Paired comparison tests showed improvements for products made to the composition.

When hair has been chemically processed, it is unavoidably damaged and has an increased anionic character resulting in a reduced rate of deposition of non-ionic silicone from shampoo when used on damaged hair. Procter & Gamble(4) claims to have overcome this by including a cationic **surfactant** in the product, made compatible with the anionic shampoo by a non-ionic hydrotope. It also claims to improve deposition of silicone on damaged hair by dissolving the silicone resin in a non-volatile silicone fluid(5) and also by using a cationic organic polymeric conditioning

agent.(6)
While mild and conditioning shampoos are of interest, there is still a demand for conditioners as a separate entity and there is far more freedom of choice when the formulator is not attempting to blend the traditionally cationic conditioning agent with the anionic cleansing agent. Hair in good condition is perceived as easy to comb, glossy and free from frayed ends. A simple rinse with an acid solution will impart many of these properties, but today's consumer expects more. The hair should not appear dry, an increase in volume and strength would be appreciated and some conditioners are capable of prolonging the life of a permanent wave.

L11 ANSWER 27 OF 39 JICST-EPlus COPYRIGHT 2002 JST
ACCESSION NUMBER: 950750822 JICST-EPlus
TITLE: Superstructure Formation of a Synthetic Lipid Bearing a Poly(ethylene glycol) Head Group with .ALPHA.-**Cyclodextrin**.
AUTHOR: NAKASHIMA N; NARIKIYO Y
CORPORATE SOURCE: Nagasaki Univ., Nagasaki
SOURCE: Chem Lett, (1995) no. 8, pp. 653-654. Journal Code: S0742A (Fig. 3, Ref. 13)
CODEN: CMLTAG; ISSN: 0366-7022
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Short Communication
LANGUAGE: English
STATUS: New
AB Mixing of an aqueous bilayer of an artificial nonionic lipid bearing a poly(ethylene glycol) as the hydrophilic head group with .ALPHA.-**cyclodextrin**(.ALPHA.-CD) was found to produce a stable crystalline inclusion complex which possessed the fundamental bilayer characteristic(phase transition) for the first time. 1H-NMR spectra of the complex showed that 2.2.+-.0.1 ethylene glycol units in the lipid were **captured** in one .ALPHA.-CD **molecule**. (author abst.)

L11 ANSWER 28 OF 39 CEN COPYRIGHT 2002 ACS

ACCESSION NUMBER: 95:548 CEN
TITLE: Special event
SOURCE: Chemical & Engineering News, (6 Mar 1995) Vol. 73, No. 10, pp. 42.
CODEN: CENEAR, ISSN: 0009-2347.
PUBLISHER: American Chemical Society
LANGUAGE: English
WORD COUNT: 13505

L11 ANSWER 29 OF 39 CEN COPYRIGHT 2002 ACS

ACCESSION NUMBER: 95:246 CEN
TITLE: Technical Program Summary
SOURCE: Chemical & Engineering News, (30 Jan 1995) Vol. 73, No. 5, pp. 42.
CODEN: CENEAR, ISSN: 0009-2347.
PUBLISHER: American Chemical Society
LANGUAGE: English
WORD COUNT: 3649

L11 ANSWER 30 OF 39 PROMT COPYRIGHT 2002 Gale Group

ACCESSION NUMBER: 93:822592 PROMT
TITLE: FRAGRANCE - MORE THAN JUST A PLEASANT SMELL
SOURCE: Cosmetics & Toiletries Manufacturers & Suppliers, (Jun 1993) pp. 23.
ISSN: 0952-519X.
LANGUAGE: English
WORD COUNT: 1817
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB Brian Willis, of Quest International, opened the proceedings with an overview of the fragrance industry. Fragrance was arguably the most powerful cosmetics & toiletries marketing tool of the 1960s and 1970s, he said, but since then its value has been re-assessed by the consumer. The 1980s brought consumer concerns such as hypoallergenicity, biodegradability and put fragrance ingredients under scrutiny. 'Today, in the nervous nineties with health and environmental concerns still uppermost in the consumers minds, they expect something more of an everyday product' he said.
He believes that future industry success depends upon the ability of fragrance suppliers to provide fragrance ingredients which contribute 'more than just a pleasant smell.' The way forward is to provide fragrances that add to product stability and shelf-life or that have intrinsic antimicrobial activity, or offer insect repellency.
The discovery of such performance ingredients, he said, will rely on the development of technologies such as 'molecular modelling' and 'structure activity correlation'. Meanwhile, aromachology (the study of the affect of fragrance on the mind), BEAM (brain electrical activity mapping) and skin headspace analysis techniques, will also play an important role.
One area where fragrances have shown phenomenal growth is in the field of aromatherapy. Although the fragrance industry uses many of the same essential oils employed by aromatherapists, the fragrance sector takes a very different approach to their use and still regards aromatherapy with some scepticism.

L11 ANSWER 31 OF 39 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 1994-007165 [01] WPIDS
DOC. NO. CPI: C1994-002779
TITLE: New colloidal system prepn. of acylated **cyclodextrin** nano spheres for carriers for pharmaceuticals - by preparing liq. phases contg. acyl gp. modified **cyclodextrin** and water and enzyme and combining, for cosmetics, chemicals and biodegradable, low viscosity suspensions for plant protection agent or pigment in printing.
DERWENT CLASS: A96 A97 B04 B07 C07 D16 D21 G02
INVENTOR(S): COLEMAN, A; DEVISSAGUET, J; DUCHENE, D; FESSI, H; PUISIEUX, F; SKIBA, M; WOUESSIDJEWE, D
PATENT ASSIGNEE(S): (CNRS) CNRS CENT NAT RECH SCI; (CNRS) CENT NAT RECH SCI
COUNTRY COUNT: 19
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG

WO 9325195 A1 19931223 (199401)* FR 23
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
W: JP US
FR 2692168 A1 19931217 (199403) 18
EP 646003 A1 19950405 (199518) FR
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
JP 07507784 W 19950831 (199543) 11
EP 646003 B1 19960814 (199637) FR 8
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
DE 69304065 E 19960919 (199643)
ES 2091012 T3 19961016 (199647)
US 5718905 A 19980217 (199814) 6

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9325195	A1	WO 1993-FR594	19930616
FR 2692168	A1	FR 1992-7287	19920616
EP 646003	A1	EP 1993-913149	19930616
		WO 1993-FR594	19930616
JP 07507784	W	WO 1993-FR594	19930616
		JP 1994-501203	19930616
EP 646003	B1	EP 1993-913149	19930616
		WO 1993-FR594	19930616
DE 69304065	E	DE 1993-604065	19930616
		EP 1993-913149	19930616
		WO 1993-FR594	19930616
ES 2091012	T3	EP 1993-913149	19930616
US 5718905	A	WO 1993-FR594	19930616
		US 1995-356167	19950308

FILING DETAILS:

PATENT NO	KIND		PATENT NO
EP 646003	A1	Based on	WO 9325195
JP 07507784	W	Based on	WO 9325195
EP 646003	B1	Based on	WO 9325195
DE 69304065	E	Based on	EP 646003
		Based on	WO 9325195
ES 2091012	T3	Based on	EP 646003
US 5718905	A	Based on	WO 9325195

PRIORITY APPLN. INFO: FR 1992-7287 19920616
AN 1994-007165 [01] WPIDS
AB WO 9325195 A UPAB: 19940217
Prodn. comprises: (1) preparing a liq. phase comprising a soln. of acylated **cyclodextrin** CD in organic solvent (or mixt.); (2) preparing a second liq. phase comprising water (or an aq. mixt.); and the phase(s) may also have a **surfactant** and/or an active intredient (I); and (3) combining the two phases with gentle stirring to form almost immediately a colloidal suspension of the nano spheres opt. contg. (I).

Opt. after prepn., some or all of the solvents are pref. **removed** to produce a suspension of the required concn. or powdered nano spheres.

The solvent in the first phase is pref. an alcohol and/or

ketone and CD is beta-CD modified by aliphatic or aromatic ocyl gps., esp. 2-20 (6-14)C alkanoyl gps.

(I) is pref. a human or veterinary pharmaceutical (or precursor), biological reactant, cosmetic component (e.g. anti-radical agent), virus (constituent), bacterium, cell, antigen, allergen, enzyme or pesticide. Typical examples are methotrexate, adriamycin, penicillins, steroid hormones, insulin, heparin, fluorescein and radiolabelled human serum albumin.

The vol. ratio first to second phase is pref. 0.1-1 and all the water is pref. **removed** from the obtd. suspension by freeze drying. The prepn. is at 0 deg.C-solvent b.pt. with stirring at e.g. 100 rpm.

Surfactants are pref. 0.1-10 (0.2-2) wt.% of the suspension produced in step (3) and (I) is incorporated into the phase in which it is soluble.

USE/ADVANTAGE - The nano spheres of size 90-900 (150-300) nm are useful as carriers for pharmaceuticals, cosmetics or chemicals, e.g. plant protection agents or pigments used e.g. in paints, varnishes, printing, etc. For therapeutic use, they may be admin. orally, cutaneously, intradermally, intramuscularly or intraveneously; and the diffusion in tissue makes them esp. useful for systemic delivery.

The nano spheres are biodegradable and the biodegradability may be controlled. They have improved storage stability and may be opt. resolubilised. C.f. nano spheres having a dense network they may incorporate higher levels of (I), i.e. some (I) is incorporated into the network and some into the CD cavity. Suspensions of the nano spheres have low viscosity so are easy to spray and (when used for pesticides) provide rapid penetration of the pest's cuticle.

Dwg.0/0

ABEQ EP 646003 B UPAB: 19960918

Process for the preparation of a dispersible colloidal system based on **cyclodextrin** in the form of nanospheres, characterised in that (1) a liquid phase is prepared which comprises a solution of **cyclodextrin** modified by acyl groups in an organic solvent or mixture of organic solvents which is (are) selected from among methanol, ethanol, isopropanol and acetone, which may or may not contain a **surfactant** and which is capable of accepting an active **molecule**, (2) a second liquid phase is prepared which comprises water or an aqueous mixture, which may or may not contain a **surfactant** and which is capable of accepting an active **molecule**, and (3) one of the liquid phases obtained under (1) or (2) is added to the other, with sufficient stirring maintained to homogenise the mixture of the phases (1) and (2), such as to obtain immediately a colloidal suspension of modified **cyclodextrin** nanospheres where appropriate containing the said active **molecule**.

Dwg.0/0

ABEQ US 5718905 A UPAB: 19980406

Prodn. comprises: (1) preparing a liq. phase comprising a soln. of acylated **cyclodextrin** CD in organic solvent (or mixt.); (2) preparing a second liq. phase comprising water (or an aq. mixt.); and the phase(s) may also have a **surfactant** and/or an active intredient (I); and (3) combining the two phases with gentle stirring to form almost immediately a colloidal suspension of the nano spheres opt. contg. (I).

Opt. after prepn., some or all of the solvents are pref. **removed** to produce a suspension of the required concn. or

powdered nano spheres.

The solvent in the first phase is pref. an alcohol and/or ketone and CD is beta-CD modified by aliphatic or aromatic ocyl gps., esp. 2-20 (6-14)C alkanoyl gps.

(I) is pref. a human or veterinary pharmaceutical (or precursor), biological reactant, cosmetic component (e.g. anti-radical agent), virus (constituent), bacterium, cell, antigen, allergen, enzyme or pesticide. Typical examples are methotrexate, adriamycin, penicillins, steroid hormones, insulin, heparin, fluorescein and radiolabelled human serum albumin.

The vol. ratio first to second phase is pref. 0.1-1 and all the water is pref. **removed** from the obtd. suspension by freeze drying. The prepn. is at 0 deg.C-solvent b.pt. with stirring at e.g. 100 rpm.

Surfactants are pref. 0.1-10 (0.2-2) wt.% of the suspension produced in step (3) and (I) is incorporated into the phase in which it is soluble.

USE/ADVANTAGE - The nano spheres of size 90-900 (150-300) nm are useful as carriers for pharmaceuticals, cosmetics or chemicals, e.g. plant protection agents or pigments used e.g. in paints, varnishes, printing, etc. For therapeutic use, they may be admin. orally, cutaneously, intradermally, intramuscularly or intraveneously; and the diffusion in tissue makes them esp. useful for systemic delivery.

The nano spheres are biodegradable and the biodegradability may be controlled. They have improved storage stability and may be opt. resolubilised. C.f. nano spheres having a dense network they may incorporate higher levels of (I), i.e. some (I) is incorporated into the network and some into the CD cavity. Suspensions of the nano spheres have low viscosity so are easy to spray and (when used for pesticides) provide rapid penetration of the pest's cuticle.

Dwg.0/0

L11 ANSWER 32 OF 39 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 1994-007164 [01] WPIDS
DOC. NO. CPI: C1994-002778
TITLE: Prepn. of **cyclodextrin**-based nano-vesicular colloidal systems - used as vectors for pharmaceuticals, cosmetics, chemicals, pigments, etc., by stirring acyl modified **cyclodextrin** and oil soln. in organic solvent, and water.
DERWENT CLASS: A96 B07 C07 D21
INVENTOR(S): DEVISSAGUET, J; DUCHENE, D; FESSI, H; PUISIEUX, F; SKIBA, M; WOUESSIDJEWE, D
PATENT ASSIGNEE(S): (CNRS) CNRS CENT NAT RECH SCI; (CNRS) CENT NAT RECH SCI
COUNTRY COUNT: 19
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9325194	A1	19931223	(199401)*	FR	20
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE					
W: JP US					
FR 2692167	A1	19931217	(199403)		19
EP 646002	A1	19950405	(199518)	FR	
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					

JP 07507783 W 19950831 (199543) 9
EP 646002 B1 19951227 (199605) FR 10
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
DE 69301150 E 19960208 (199611)
ES 2083291 T3 19960401 (199621)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9325194	A1	WO 1993-FR593	19930616
FR 2692167	A1	FR 1992-7285	19920616
EP 646002	A1	EP 1993-913148	19930616
		WO 1993-FR593	19930616
JP 07507783	W	WO 1993-FR593	19930616
		JP 1994-501202	19930616
EP 646002	B1	EP 1993-913148	19930616
		WO 1993-FR593	19930616
DE 69301150	E	DE 1993-601150	19930616
		EP 1993-913148	19930616
		WO 1993-FR593	19930616
ES 2083291	T3	EP 1993-913148	19930616

FILING DETAILS:

PATENT NO	KIND		PATENT NO
EP 646002	A1	Based on	WO 9325194
JP 07507783	W	Based on	WO 9325194
EP 646002	B1	Based on	WO 9325194
DE 69301150	E	Based on	EP 646002
		Based on	WO 9325194
ES 2083291	T3	Based on	EP 646002

PRIORITY APPLN. INFO: FR 1992-7285 19920616
AN 1994-007164 [01] WPIDS
AB WO 9325194 A UPAB: 19940217
Prepn. comprises: (1) prepn. of a soln. of **cyclodextrin** modified by acyl gps.; and an oil in an organic solvent or solvent mixt., opt. contg. a **surfactant** and/or an active **molecule**; (2) prepn. of a liq. phase consisting of water or an aq. mixt. and opt. contg. a **surfactant** and/or an active **molecule**; and (3) gently stirring one of the phases (1) and (2) into the other to obtain, almost immediately a colloidal suspension of nanocapsules having a modified **cyclodextrin** wall and contg. the oil and the opt. active **molecule**.

USE/ADVANTAGE - The nanocapsules (I) are used to carry pharmaceutical , cosmetic and chemical prods. (I) can be used in human and veterinary medicine to reach new sites of action (partic. intracellular or even intralysosomal), to give new routes of admin. for known prods., increasing stability and/or absorbance of active ingredients or allowing injection including intravenous admin. of insol. prods. and to modify tissue distribution of active prods. by better targetting of desired sites and/or avoidance of undesired sites. Claimed active **molecules** are drugs or drug precursors for human or veterinary use, biological reagents, cosmetics, virus or virus constituents, bacteria or cells, antigens, allergens or enzymes. The drugs include antimitotic, antineoplastic

and antibiotic substances, hormones, high **mol**.wt. cpds. (e.g., insulin and heparin); the biological prods. may be proteins. (I) can be used to carry diagnostic agents, e.g., fluorescein or radioactive human seralbumin or radio-opaque lipophilic agents (e.g., radio-iodine contg. oils). (I) are useful is cosmetics to carry anti-radical and other prods. to the dermis. (I) are useful in plant health to carry insecticides, pesticides, etc., their size allowing stronger action by better penetration of the cuticle. The low viscosity of the dispersion allows finer sprays and better coverage. (I) are useful in paints, varnishes and general surface treatments, to carry, e.g., pigments, the small particle size giving a good finish and homogeneity. In paint strippers the low viscosity of the aq. dispersion gives ease of application. (I) are also useful in printing and reprographics, in photography, for the surface treatment of textiles and fibres, in lubrication and in agriculture. The particle size obtd. is 100-900 (100-500)nm according to operating conditions. The operating temp. can be 0 deg.C to b.pt. of solvent. prepn. of nanocapsules by polymerisation gives poor control of particle size and leaves monomers and oligomers and possibly initiators and catalysts which may require **removal** (possible difficult) before pharmaceutical use. The claimed nanovesicular system does not have these disadvantages and (I) are also biodegradable; modification of the alkyl chains of the acyl gps. alters the biodegradability.
Dwg.0/0

ABEQ EP 646002 B UPAB: 19960205
A process for the preparation of a **cyclodextrin**-based dispersible colloidal system in the form of nanocapsules, characterised in that 1) a liquid phase is prepared, comprising a solution of **cyclodextrin** modified by acyl groups and an oil in an organic solvent or mixture of organic solvents selected from methanol, ethanol, isopropanol and acetone, optionally containing a **surfactant** and to which an active **molecule** can be added, 2) a second liquid phase is prepared, comprising water or an aqueous mixture, optionally containing a **surfactant** and to which an active **molecule** can be added, and 3) one of the liquid phases obtained under (1) or (2) is added to the other while stirring gently, that is to say stirring sufficiently to homogenise the mixture, so as to obtain instantaneously a colloidal suspension of nanocapsules, the wall thereof being formed by modified **cyclodextrin** and the cavity consisting of oil optionally containing the active **molecule**.
Dwg.0/0

L11 ANSWER 33 OF 39 CEN COPYRIGHT 2002 ACS

ACCESSION NUMBER: 92:1149 CEN
TITLE: **Cyclodextrin** Research Focuses on Variety of Applications
Symposium explores use of cyclic carbohydrates in organic synthesis, enzyme catalysis, food processing, and pollution control
AUTHOR: Haggin, Joseph
SOURCE: Chemical & Engineering News, (18 May 1992) Vol. 70, No. 20, pp. 25.
CODEN: CENEAR, ISSN: 0009-2347.
PUBLISHER: American Chemical Society

LANGUAGE: English
WORD COUNT: 1140

L11 ANSWER 34 OF 39 CEN COPYRIGHT 2002 ACS

ACCESSION NUMBER: 91:687 CEN
TITLE: Capillary electrophoresis
SOURCE: Chemical & Engineering News, (18 Mar 1991) Vol. 69, No. 11, pp. 28.
CODEN: CENEAR, ISSN: 0009-2347.
PUBLISHER: American Chemical Society
LANGUAGE: English
WORD COUNT: 2964

L11 ANSWER 35 OF 39 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 1990-080396 [11] WPIDS
DOC. NO. CPI: C1990-035431
TITLE: Powder detergent compsn. for clothing - contains higher fatty acid salt, polyoxyethylene alkyl ether and **cyclodextrin** for good rinsing property.
DERWENT CLASS: A97 D25 E12
PATENT ASSIGNEE(S): (KAOS) KAO CORP
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
JP 02034693	A	19900205	(199011)*		4
JP 2513794	B2	19960703	(199631)		3

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 02034693	A	JP 1988-183174	19880722
JP 2513794	B2	JP 1988-183174	19880722

FILING DETAILS:

PATENT NO	KIND		PATENT NO
JP 2513794	B2	Previous Publ.	JP 02034693

PRIORITY APPLN. INFO: JP 1988-183174 19880722
AN 1990-080396 [11] WPIDS
AB JP 02034693 A UPAB: 19970502
Powder detergent compsn. based on a synthetic anionic **surfactant**, contains 1-6 wt.% of a higher fatty acid salt, 0.5-6 wt.% of a polyoxyethylene (average addn. **mol**. number of ethylene oxide= 8-10) alkyl ether, and 0.1-5 wt.% of **cyclodextrin**.

Fatty acid salts include alkali metal salts of 10-20C (average), pref. 16-18C, satd./unsatd. fatty acids. The odour of soap is **removed** by the inclusion ability of the **cyclodextrin**. **Cyclodextrins** include beta-**cyclodextrin**, methylated beta-**cyclodextrin**, alpha-**cyclodextrin**, and gamma-**cyclodextrin**, of which the

most. pref. is beta-**cyclodextrin**. **Cyclodextrin** is blended in the form of powder or granules prepd. by granulation with an extender or a binder. It opt. includes a liq. perfume.

USE/ADVANTAGE - The compsn. has improved rinsing property: prepd. samples left only fine foam after the first rinsing and no foam after the second.

Dwg.0/0

L11 ANSWER 36 OF 39 MEDLINE DUPLICATE 4

ACCESSION NUMBER: 91292115 MEDLINE
DOCUMENT NUMBER: 91292115 PubMed ID: 2490524
TITLE: Analytical applications of enhanced drug luminescence.
AUTHOR: Baeyens W R; Ling B L
CORPORATE SOURCE: Laboratory of Pharmaceutical Chemistry and Drug Analysis, Faculty of Pharmaceutical Sciences, State University of Ghent, Belgium.
SOURCE: JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, (1989) 7 (12) 1385-94. Ref: 53
Journal code: 8309336. ISSN: 0731-7085.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199108
ENTRY DATE: Entered STN: 19910901
Last Updated on STN: 19980206
Entered Medline: 19910814

AB Luminescence emission from drugs is strongly dependent on their physicochemical environment. Several biomedically and environmentally important compounds and pharmaceuticals exhibit sufficient intrinsic luminescence properties to allow their determination by high-performance liquid chromatography (HPLC) with fluorimetric, chemiluminescence or room temperature phosphorimetric detection. In the case of weakly fluorescing compounds it is possible to use the dependence of the emitted radiation on the molecular environment at the moment of measurement. The composition of the eluent, i.e. solvents, added salts and buffers, pH and ionic strength, oxygen content and temperature, are of the highest importance for the luminescence detection of drugs in solution (e.g. in liquid chromatography) or adsorbed onto solid surfaces (e.g. in thin-layer chromatography). Post-column or post-plate acid-base manipulation and the use of specific reagents may remarkably enhance the observed luminescence of several **molecules**. The term "enhancement" of luminescence comprises various sample treatments leading to an increase of the emitted radiation. These treatments include the addition of non-fluorescent compounds to, or the creation of organized media (**surfactants**, **cyclodextrins**, heavy atoms) in, the sample to be measured. They may also involve changes in molecular environment, pH, the application of excessive drying conditions, the **removal** of oxygen, the protection of adsorbed compounds against non-radiative decay mechanisms by means of specific spraying or dipping conditions, amongst others. The use of organized media in luminescence spectroscopy is growing. Many of the recent studies have involved micelles for enhancing the fluorescence, room

temperature phosphorescence and chemiluminescence of several chemicals. **Cyclodextrins** are increasingly used for various analytical applications. Liquid paraffin, triethanolamine, dodecane, Triton X-100 and Fomblin Y-Vac are commonly used fluorescence enhancers in chromatographic assays. Examples of these systems in drug analysis are presented.

L11 ANSWER 37 OF 39 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1989:132444 BIOSIS
DOCUMENT NUMBER: BA87:67097
TITLE: THE SEQUESTERING OF **SURFACTANTS** FROM INSOLUBLE MONOLAYERS BY ALPHA BETA AND GAMMA **CYCLODEXTRINS**.
AUTHOR(S): ASGHARIAN B; CADENHEAD D A; GODDARD E D
CORPORATE SOURCE: DEP. CHEM., STATE UNIV. N.Y. BUFFALO, BUFFALO, N.Y. 14214, USA.
SOURCE: COLLOIDS SURF, (1988) 34 (2), 143-150. CODEN: COSUD3. ISSN: 0166-6622.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB A study of the sequestering of insoluble **surfactants** by .alpha.-, .beta.- and .gamma.-**cyclodextrins** from monomolecular films at the air/water interface is reported. Sequestering of single-chain **surfactants** by .alpha.- and .beta.-**cyclodextrins** takes place at a rate consistent with the direct **removal** of the **surfactant molecule** from the air/water interface and well in excess of that which would arise from a film/substrate equilibrium followed by sequestering of the dissolved **surfactant**. Sequestering involves the formation of **surfactant:cyclodextrin** complexes, probably 1:1, with the **surfactant** alkane chain immersed in the hydrophobic cavity of the **cyclodextrin** .gamma.-**cyclodextrin**, in spite of its larger cavity, failed to sequester a detectable amount of **surfactant** over a period of one hour under conditions favorable for sequestering by either .alpha.- or .beta.-**cyclodextrin**. This is explained in terms of the .gamma.-**cyclodextrin** cavity being effectively less hydrophobic. The rate of insoluble **surfactant** sequestration was found to decrease with the formation of a liquid condensed as opposed to a liquid expanded film state, with increasing alkane-chain length of the **surfactant**, and with chain branching. **Molecules** with two chains, such as lecithins, were not sequestered but cholesterol with a similar cross-sectional area/**molecule** did show a weak interactive coupling with .beta.-**cyclodextrin** below 30.degree. C. Based on the observed increased areas/**molecule**, this latter interaction brought .beta.-**cyclodextrin** into the air/water interface rather than **removing** cholesterol, indicating the "complex" still possessed substantial hydrophobicity.

L11 ANSWER 38 OF 39 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 1982-33775E [17] WPIDS
TITLE: Stable lysozyme aq. soln. - contains quat. ammonium or bi pyridinium cationic **surfactant** and dextrin or **cyclodextrin**.
DERWENT CLASS: B04 B05
PATENT ASSIGNEE(S): (SSSE) SS PHARMACEUTICAL KK
COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
JP 57046922	A	19820317	(198217)*		4

PRIORITY APPLN. INFO: JP 1980-123089 19800905
AN 1982-33775E [17] WPIDS
AB JP 57046922 A UPAB: 19930915
Stable lysozyme aqueous soln. is obtd. by adding quat. ammonium bipyridinium cationic **surfactant** and dextrin or cyclohextrin to lysozyme aqs. soln. which is obtd. by **removing** impurities by precipitation.

The resulting lysozyme aq. soln. does not form precipitates even if stored for a long period, and is suitable for pharmaceuticals particularly eye-wash.

Specifically the stable lysozyme aqs. soln. is prepared as follows. Lysozyme or its salt is dissolved in water to a concn. of 1-5%. This soln. is heated at 40-60 deg.C for about 1 hour. The formed precipitate is **removed** by membrane filter, paper filter or glass filter. Cationic **surface active** agents are benzalkonium chloride, benzethonium chloride, cetyl pyridinium chloride, etc. The **surfactant** is added in a concn. of 0.001-0.1%. **Mol**. wt. of dextrin or **cyclodextrin** is pref. 4000-6000, and this is added in a concn. of 0.1-1%.

L11 ANSWER 39 OF 39 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 1981-04633D [04] WPIDS
TITLE: Cleaning and deodorising compsn. for stool flushing water - is obtd. by mixing poly alkylene glycol **surfactant** and saccharide with other additives.
DERWENT CLASS: A97 D15
PATENT ASSIGNEE(S): (MIKA) MIKASA KAGAKU KOGYO KK
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
JP 55147597	A	19801117	(198104)*		

PRIORITY APPLN. INFO: JP 1979-54856 19790504
AN 1981-04633D [04] WPIDS
AB JP 55147597 A UPAB: 19930915
Compsn. is obtd. by mixing a water-soluble solid polyalkylene glycol series **surfactant** and a water-soluble saccharide or its deriv. e.g. dextrin, alpha,beta,gamma-**cyclodextrin**, glycomannan, pectin, glycogen, methyl cellulose, carboxycellulose, sodium alginate, etc. together with a perfume, a deodorant, a cleaner, a fungicide, a dye, etc. as needed,and and then solidifying the mixt. by cooling.

The compsn. cleans, deodorises, sterilises and gives a fragrance and colour to the washing water effectively and simply.

In an example, 25% polyethylene glycol (**mol**. wt. 10000), 20% polyethylene-propylene glycol (**mol**. wt. 8000), 25% perfume mixt., 5% para-dichlorbenzene (deodorant), 3% polyoxyethylenenonylphenylether (cleaning agent), 2% benzalkonium chloride (fungicide), 1% moss **remover**, 3% blue dye, and 15% milk sugar, were mixed, melted by heating, and then solidified by cooling.

FILE 'HCAPLUS' ENTERED AT 14:32:21 ON 05 AUG 2002)

L1	1	SEA FILE=REGISTRY ABB=ON PLU=ON CYCLODEXTRIN/CN
L2	1	SEA FILE=REGISTRY ABB=ON PLU=ON .ALPHA.-CYCLODEXTRIN/CN
L3	1	SEA FILE=REGISTRY ABB=ON PLU=ON .BETA.-CYCLODEXTRIN/CN
L4	1	SEA FILE=REGISTRY ABB=ON PLU=ON .GAMMA.-CYCLODEXTRIN/CN
L5	4	SEA FILE=REGISTRY ABB=ON PLU=ON L1 OR L2 OR L3 OR L4
L6	22326	SEA FILE=HCAPLUS ABB=ON PLU=ON L5 OR CYCLODEXTRIN OR CYCLO DEXTRIN
L12	19842	SEA FILE=HCAPLUS ABB=ON PLU=ON (MOL OR MOLECULE)(3A)(CAPTUR? OR RETRIEV? OR ISOL? OR REMOV?)
L13	43	SEA FILE=HCAPLUS ABB=ON PLU=ON L6 AND L12
L14	0	SEA FILE=HCAPLUS ABB=ON PLU=ON L13 AND (MICELLE OR VESICL?)

L1	1	SEA FILE=REGISTRY ABB=ON PLU=ON CYCLODEXTRIN/CN
L2	1	SEA FILE=REGISTRY ABB=ON PLU=ON .ALPHA.-CYCLODEXTRIN/CN
L3	1	SEA FILE=REGISTRY ABB=ON PLU=ON .BETA.-CYCLODEXTRIN/CN
L4	1	SEA FILE=REGISTRY ABB=ON PLU=ON .GAMMA.-CYCLODEXTRIN/CN
L5	4	SEA FILE=REGISTRY ABB=ON PLU=ON L1 OR L2 OR L3 OR L4
L6	22326	SEA FILE=HCAPLUS ABB=ON PLU=ON L5 OR CYCLODEXTRIN OR CYCLO DEXTRIN
L12	19842	SEA FILE=HCAPLUS ABB=ON PLU=ON (MOL OR MOLECULE)(3A)(CAPTUR? OR RETRIEV? OR ISOL? OR REMOV?)
L13	43	SEA FILE=HCAPLUS ABB=ON PLU=ON L6 AND L12

L15	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L13 AND AGGREGAT?
L16	2	S L15 NOT L9

L16 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:	2000:16691 HCAPLUS
DOCUMENT NUMBER:	132:70918
TITLE:	Long-lived phosphorescence of aqueous solutions of .beta.-**cyclodextrin** complexes with naphthalene and its derivatives at room temperature
AUTHOR(S):	Nazarov, V. B.; Vershinnikova, T. G.; Alfimov, M. V.
CORPORATE SOURCE:	Institute of Problems of Chemical Physics, Russian Academy of Sciences, Chernogolovka, 142432, Russia
SOURCE:	Russian Chemical Bulletin (Translation of Izvestiya Akademii Nauk, Seriya Khimicheskaya)

(1999), 48(10), 1998-2000
CODEN: RCBUEY; ISSN: 1066-5285
PUBLISHER: Consultants Bureau
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A long-lived phosphorescence at room temp. (lifetime >1 s) of aq. solns. of .beta.-**cyclodextrin** complexes with naphthalene and its derivs. was found. The phosphorescence is obsd. for **aggregated** complexes that form in H2O a light-scattering suspension, and its low intensity is due to predomination of 2: 2 complexes with efficient excimer fluorescence. Complexes contg. **isolated** arom. **mols.** are assumed to be the centers of fluorescence.

IT **7585-39-9D**, .beta.-**Cyclodextrin**, naphthalene derivs. complexes
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(long-lived phosphorescence and fluorescence of aq. solns. of .beta.-**cyclodextrin** complexes with naphthalene and derivs. at room temp.)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:819257 HCAPLUS
DOCUMENT NUMBER: 124:55192
TITLE: Unusual redox behavior of a water soluble malonic acid derivative of C60: evidence for possible cluster formation
AUTHOR(S): Guldi, Dirk M.; Hungerbuehler, Hartmut; Asmus, Klaus-Dieter
CORPORATE SOURCE: Bereich Physikalische Chemie, Hahn-Meitner-Inst. Berlin, Berlin, 14109, Germany
SOURCE: J. Phys. Chem. (1995), 99(36), 13487-93
CODEN: JPCHAX; ISSN: 0022-3654
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Although fullerenes are known to be easily and efficiently reduced, no such reaction could be obsd. between one of the most powerful reductants, the hydrated electron, and water-sol. C60C(COO-)2, a malonic acid deriv. of C60. This lack of reactivity is attributed to clustering of this functionalized fullerene in the aq. phase, in which it is suggested to form kind of a micellar **aggregate** with the hydrophobic C60 core in the center and the hydrophilic carboxyl groups sticking into the water phase. Redn. of C60C(COO-)2 by eaq- readily occurs, however, if clustering is prevented by embedding an **isolated** single fullerene **mol.** into .gamma.-**cyclodextrin**. Further evidence for clustering in polar environment (water and lower alcs.) is provided by the ground state absorption spectrum of C60C(COO-)2, which shows considerable line broadening in conjunction with lower extinction coeffs. as compared with C60C(COOH)2 in less polar, e.g. toluene, solns. The clustering concept is also supported by the short lifetime of the triplet excited state, (3C60)C(COO-)2, in water (t1/2 .apprxeq. 0.4 .mu.s) as compared to that of the .gamma.-**cyclodextrin** encapsulated (3C60)C-(COO-)2/.gamma.-CD (t1/2 = 55 .mu.s). Reductive quenching of the latter (.lambda.max = 720 nm) by DABCO

occurs with 6.9 .times. 106 M-1 s-1 and yields the fullerene radical anion (C60.bul.-)C(COO-)2/.gamma.-CD, identifiable by its 1040-nm IR band.

IT **17465-86-0**, .gamma.-**Cyclodextrin**
RL: RCT (Reactant)
(pulse radiolysis of functionalized fullerene in aq. phase in presence of)

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, CIN, CEN, PROMT, CBNB' ENTERED AT 14:37:46 ON 05 AUG 2002)

L17 2 S L14
L18 4 S L15
L19 2 S (L17 OR L18) NOT L10
L20 2 DUP REM L19 (0 DUPLICATES REMOVED)

L20 ANSWER 1 OF 2 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 2000:11179 SCISEARCH
THE GENUINE ARTICLE: 267VD
TITLE: Long-lived phosphorescence of aqueous solutions of beta-**cyclodextrin** complexes with naphthalene and its derivatives at room temperature
AUTHOR: Nazarov V B (Reprint); Vershinnikova T G; Alfimov M V
CORPORATE SOURCE: RUSSIAN ACAD SCI, INST PROBLEMS CHEM PHYS, CHERNOGOLOVKA 142432, MOSCOW REGION, RUSSIA (Reprint)
COUNTRY OF AUTHOR: RUSSIA
SOURCE: RUSSIAN CHEMICAL BULLETIN, (OCT 1999) Vol. 48, No. 10, pp. 1998-2000.
Publisher: PLENUM PUBL CORP, CONSULTANTS BUREAU, 233 SPRING ST, NEW YORK, NY 10013.
ISSN: 1066-5285.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: PHYS
LANGUAGE: English
REFERENCE COUNT: 12
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB A long-lived phosphorescence at room temperature (lifetime > 1 s) of aqueous solutions of beta-**cyclodextrin** complexes with naphthalene and its derivatives was found. The phosphorescence is observed for **aggregated** complexes that form in water a light-scattering suspension, and its low intensity is due to predomination of 2 : 2 complexes with efficient excimer fluorescence. Complexes containing **isolated** aromatic **molecules** are assumed to be the centers of fluorescence.

L20 ANSWER 2 OF 2 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 95:629776 SCISEARCH
THE GENUINE ARTICLE: RU476
TITLE: UNUSUAL REDOX BEHAVIOR OF A WATER-SOLUBLE MALONIC-ACID DERIVATIVE OF C-60 - EVIDENCE FOR POSSIBLE CLUSTER FORMATION
AUTHOR: GULDI D M (Reprint); HUNGERBUHLER H; ASMUS K D
CORPORATE SOURCE: UNIV NOTRE DAME, RADIAT LAB, NOTRE DAME, IN, 46556 (Reprint); HAHN MEITNER INST BERLIN GMBH, BEREICH PHYS CHEM, D-14109 BERLIN, GERMANY
COUNTRY OF AUTHOR: USA; GERMANY

09/855329

SOURCE: JOURNAL OF PHYSICAL CHEMISTRY, (07 SEP 1995) Vol. 99, No. 36, pp. 13487-13493.
ISSN: 0022-3654.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: PHYS
LANGUAGE: ENGLISH
REFERENCE COUNT: 59

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Although fullerenes are known to be easily and efficiently reduced, no such reaction could be observed between one of the most powerful reductants, the hydrated electron, and water-soluble C60C(COO-)(2), a malonic acid derivative of C-60 This lack of reactivity is attributed to clustering of this functionalized fullerene in the aqueous phase, in which it is suggested to form kind of a micellar **aggregate** with the hydrophobic C-60 core in the center and the hydrophilic carboxyl groups sticking into the water phase. Reduction of C60C(COO-)2 by e(aq)(-) readily occurs, however, if clustering is prevented by embedding an **isolated** single fullerene **molecule** into gamma-**cyclodextrin**. Further evidence for clustering in polar environment (water and lower alcohols) is provided by the ground state absorption spectrum of C60C(COO-)(2), which shows considerable Line broadening in conjunction with lower extinction coefficients as compared with C60C(COOH)(2) in less polar, e.g. toluene, solutions. The clustering concept is also supported by the short lifetime of the triplet excited state, (C-3(60))C(COO-)(2), in water (t(1/2) approximate to 0.4 mu s) as compared to that of the gamma-**cyclodextrin** encapsulated (C-3(60))C-(COO-)(2)/gamma-CD (t(1/2) 55 mu s). Reductive quenching of the latter (lambda(max) = 720 nm) by DABCO occurs with 6.9 x 10(6) M(-1) s(-1) and yields the fullerene radical anion (C-60(.-))C(COO-)2/gamma-CD, identifiable by its 1040-nm IR band.

FILE 'HOME' ENTERED AT 14:40:04 ON 05 AUG 2002